

Verb chains in Nizaa

Bjørghild Kjelsvik



Thesis
submitted in partial fulfillment
of the requirements for
the degree of Cand. Philol.
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<u>1</u>	<u>INTRODUCTION</u>	<u>3</u>
1.1	THE NIZAA LANGUAGE	3
1.2	STRUCTURE OF THE THESIS:	3
1.2.1	THE MAIN POINTS OF THE THEORETICAL FRAMEWORK AND HOW IT IS USED:	3
1.3	THE CORPUS	4
1.3.1	THE FORMALISM OF THE EXAMPLES	5
1.3.2	OTHER FORMALISMS:	6
1.3.3	ABBREVIATIONS	7
1.4	ON THE TEXTS	7
<u>2</u>	<u>A SHORT OVERVIEW OF NIZAA GRAMMAR</u>	<u>9</u>
2.1	PHONOLOGY	9
2.1.1	SYLLABLE-STRUCTURE	9
2.1.2	VOWELS	9
2.1.3	CONSONANTS	10
2.1.4	MORPHOPHONOLOGY	11
2.1.5	TONES	12
2.2	WORD ORDER AND SENTENCE TYPES.	13
2.3	NOUNS	17
2.4	PRONOUNS	18
2.5	VERBS AND VERB MORPHOLOGY	18
2.5.1	VERBAL DERIVATIONS	18
2.5.2	INFLECTIONS:	20
<u>3</u>	<u>MULTIPLE VERBS IN NIZAA CLAUSES</u>	<u>22</u>
3.1	FORMAL CHARACTERISTICS	22
3.2	FREQUENCIES	23
3.2.1	COMMENTS ON THE TABLES:	26
3.3	DISTRIBUTION PATTERNS IN 2-VERB CHAINS	27
3.3.1	COMMENTS ON THE DISTRIBUTION PATTERN TABLES:	30
3.4	SERIAL VERBS	30
3.4.1	NIZAA CHAINS - SERIAL VERBS OR COMPOUNDS?	31

4 THEORETICAL FRAMEWORK OF THE THESIS 34

4.1	EVENT INTEGRATION	34
4.1.1	MACRO-EVENT, FRAMING EVENT AND CO-EVENT	35
4.1.2	THE FRAMING EVENT	36
4.1.3	THE CO-EVENT	39
4.2	FRAMING EVENTS IN A TYPOLOGICAL PERSPECTIVE	41
4.2.1	SATELLITES	41
4.2.2	SATELLITE-FRAMED AND VERB- FRAMED LANGUAGES	42
4.2.3	ILLUSTRATION OF THE TWO TYPES	43
4.3	LEXICALISATION AND CONSTRUCTION; SYNTACTIC CONSIDERATIONS	45
4.3.1	LEXICALISATION PATTERNS	45
4.3.2	SYNTAX	47
4.3.3	PATTERNS LICENSING GENERIC VERBS AND PLEONASTIC CONSTRUCTIONS	48
4.4	SUMMARY	48

5 APPLYING THE THEORY 52

5.1	MACRO-EVENTS AND VERB CHAINS	52
5.2	ICONICITY AND ECONOMY	53
5.2.1	ICONICITY	53
5.2.2	ECONOMY	54
5.3	BACKGROUNDING IN THE VERBAL COMPLEX	55
5.4	EVENT SEMANTICS AND MOTION	56
5.4.1	SEMANTIC ‘BUILDING-BLOCKS’	56
5.4.2	NIZAA	57
5.5	HYPOTHESES	60

6 ANALYSIS OF THE 2-VERB CHAINS 63

6.1	MOTION AS FRAMING EVENT	63
6.1.1	PRECURSION	64
6.1.2	ENABLEMENT	65
6.1.3	CAUSE AND MANNER	66
6.1.4	CONCOMITANCE	73
6.1.5	CONCURRENT RESULT	73

6.1.6	SUBSEQUENCE	73
6.1.7	CONSTITUTIVENESS	75
6.1.8	CHAINS WITH TWO MOTION-VERBS	76
6.1.9	SUMMARY OF MOTION AS FRAMING EVENT	81
6.2	TEMPORAL CONTOURING AS FRAMING EVENT	81
6.2.1	‘TO BEGIN DOING’	83
6.2.2	‘TO STAY DOING’	85
6.2.3	‘TO FINISH DOING’	86
6.2.4	‘TO RETURN TO DOING’	87
6.2.5	SUMMARY OF TEMPORAL CONTOURING AS FRAMING EVENT	89
6.3	STATE CHANGE AS FRAMING EVENT	89
6.3.1	PRECURSION	91
6.3.2	ENABLEMENT	91
6.3.3	CAUSE	92
6.3.4	MANNER	95
6.3.5	CONCOMITANCE	96
6.3.6	SUBSEQUENCE	97
6.3.7	CONSTITUTIVENESS	98
6.3.8	SUMMARY OF STATE CHANGE AS FRAMING EVENT	100
6.4	ACTION CORRELATING	100
6.4.1	COMITATIVE WITH YÚCÍŋ ‘BE.TOGETHER’	102
6.4.2	DATIVE WITH NI ‘GIVE’	104
6.4.3	OTHER ACTION CORRELATING VERBS	109
6.4.4	SUMMARY OF ACTION CORRELATING AS FRAMING EVENT	112
6.5	REALIZATION	113
6.5.1	SUMMARY OF REALIZATION AS FRAMING EVENT	118
6.6	SUMMARY OF TWO-VERB CHAINS	118
<u>7</u>	<u>ANALYSIS OF 3-AND 4- VERB CHAINS</u>	<u>121</u>
7.1	FREQUENCIES AND DISTRIBUTION PATTERNS	121
7.1.1	DISTRIBUTION PATTERNS IN 3- AND 4-VERB CHAINS	121
7.2	THREE-VERB CHAINS	123
7.2.1	MOTION	124
7.2.2	STATE CHANGE	128
7.2.3	ACTION CORRELATING	129
7.3	FOUR-VERB CHAINS	135

7.4	SUMMARY OF 3- AND 4-VERB CHAINS	137
8	<u>CONCLUSIONS</u>	<u>138</u>
8.1	MACRO-EVENTS IN VERB CHAINS	138
8.1.1	FRAMING EVENTS AND CO-EVENTS	138
8.1.2	THE 'STORY-LINE' CONNECTION	139
8.1.3	THE CHAINS AND BACKGROUNDING	140
8.1.4	FURTHER COMMENTS ON THE FRAMING EVENT TYPES	140
8.2	GRAMMATICALIZATION ISSUES	141
8.3	VERB-FRAMED OR SATELLITE-FRAMED?	143

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The next 7 years, then, I was busily occupied with creating primers and reading material, publishing story collections and health booklets, and getting started on a translation of the New Testament. When my term was over, it felt necessary to reflect somewhat more profoundly on the structures of this language, and so I started on the process that has lead to the present thesis. It has been a most rewarding experience to finally have time for thinking through some of the data that I had gathered during my stay in Cameroon.

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1 INTRODUCTION

1.1 The Nizaa language

About 10.000 people in Cameroun speak the Nizaa language. They live for the most part in and around Galim, a village of some 2000 inhabitants in the Faro et Deo Departement of the Adamaoua province. The area may cover about 100 km², stretching eastward from the Nigerian border. Cameroun is truly a conglomerate of languages (about 250) and so several other languages are spoken in the same area, notably Fula (Foulfoulde) and Hausa, but also Mbum, Tchamba (Samba), Gbaya, Pere and others. Most Nizaa speakers know Fula in addition to their own language, since it is the prevalent lingua franca of northern Cameroun.

As for the genetic classification of Nizaa, we base ourselves on Endresen 1990/91 and 1992. In these articles he comprehensively evaluates the different classifications made, and refutes them as not being founded on well-established comparative methods of classification. Endresen 1990/91 reconstructs earlier stages of Nizaa and shows regular correspondences with proto-Bantu forms. From this treatment it is clear that Nizaa belongs to a Bantoïd sub-branch of the Benue-Congo branch of the Niger-Congo family, but otherwise it is not satisfactorily accounted for.

1.2 Structure of the thesis:

In this thesis we shall work with a particular structure of multiple verbs in Nizaa, called verb chains. We will show in chapter 1 that such complex predicates are frequently used in Nizaa, covering about 34 % of the total occurrences of clauses with verbs in the corpus. Chapter 2 describes the frequency of the different verbs in the corpus and groups them according to distributional patterns. A theory of complex events is presented in chapter 4 and further expanded and applied to Nizaa in chapter 5. In the two following chapters, 6 and 7, we then will examine Nizaa verb complexes from the point of view of this theoretical framework of complex event, before concluding on the finds in chapter 8. Appendix A give whole-sentence versions of all the language examples, and Appendix B lists the different types of complex predicates of the corpus.

1.2.1 The main points of the theoretical framework and how it is used:

The theory employed is taken from Talmy 2000, and understands a particular kind of complex events as macro-events, consisting of a framing event and a co-event conceptually welded together. Such macro-events give rise to syntactic constructions where the framing event essentially is expressed by closed-class elements and the co-event essentially by open-class elements. Languages furthermore are

typologically divided into satellite-framed and verb-framed languages by the type of syntactic pattern used to express the macro-event. Cross-linguistic studies show that there is a very small set of framing events and only a slightly larger set of support relations between framing events and co-events. The framing events are Motion, Temporal contouring, State change, Action correlating and Realization, all pertaining to how a Figure or a figural entity is related to a Ground or a ground entity.

We show in the analysis chapters that 2, 3 or 4 verb roots put together affect both the syntactic and semantic structure of a clause. Our focus has been on the semantics side, working in each case to discern the relevant semantic categories. The syntactic structure is on the other hand an important instrument in such an enterprise: it would have been impossible to arrive at an understanding of the semantics without observing the actual words and grammatical relation present in the clauses. The analysis arrives at dividing the material of the corpus into the 5 framing event types, assigning also a co-event support relation to each chain.

1.3 The corpus

The thesis is based on a corpus of Nizaa texts originally written by native speakers of Nizaa. The texts vary in length from shorter ones taken from the Nizaa primer (4-6 periods) till longer stories and tales (9-37 periods). The last category of texts stems either from the collection of Nizaa tales published in 1996 or from my own field notes. In the case of the printed texts, several Nizaa speakers proofread them.

The corpus contains 17 texts containing 183 periods¹. I have interlinearized all the texts, with morphemes, parts of speech and word-by-word-meaning given.² Some periods have an uncertain reading, and are not used in the analysis. In the corpus there are some 375 verbal sentences and clauses.³ Nizaa also has clauses with copula and predicate nominals and the corpus contains a number of such clauses, but they are not counted and not further treated in the analysis.

Within the group of verbal clauses, I have found 173 single verb clauses (simplex clauses). Counting clauses with more complex constructions, I have found 28 periphrastic constructions with copula particle, and 40 with a construction tentatively called modal and involving modal verb and a special form of the final verb of the subordinate clause. The modal construction group contains per definition 80 clauses, 40 matrix clauses and 40 subordinate clauses. 105 more clauses are main clauses containing 2 or more verb roots.

¹ With 'Period' is here simply meant as what appears within two full stops, and as such the number only serves to give an idea of the amount of text used.

² The software used for this was "The Linguist's Shoebox", a non-commercial database-program developed by the SIL for doing linguistic analysis. Tavultesoft's keyboard manager "Keyman" was used to write the Nizaa letters and tones, with a Doulos-font developed by SIL for Cameroonian languages.

³ The number does not include clauses with uncertain readings.

Of the 28 with periphrastic verbal constructions mentioned above, 8 clauses have more than 1 verb within the clause. 15 clauses of the 40 modal constructions have more than 1 verb either at the modal-verb place or at the final-verb place, 1 clause have both. Total number of clauses containing ‘chains’ is accordingly 128. (‘Chains’ denotes the multiple-verb structures that are the subject of this thesis –this concept is further defined in 3.1.)

The fact that 34,8 % of the clauses in the corpus contain a multiple-verbal construction indicates the importance of such constructions in the Nizaa language. Figure 1-1 below shows the numbers with approximate percentages of total given.

Figure 1-1 Multiple-verb constructions in the corpus

<i>Clauses</i>	<i>‘Verbal’ clauses⁴</i>		<i>Periphrastic verb cl.</i>		<i>Modal verb cl.</i>		<i>Totals</i>	
–Chains	173	46,1 %	20	5,3 %	54	14,4 %	247	65,9 %
+Chains	105	28,0 %	8	2,1 %	15	4,0 %	128	+34,1 %
Totals	278	74,1%	28	+7,4 %	80	+18,4 %	375	≈100 %

1.3.1 The formalism of the examples

Language examples are often given as parts of sentences, so as not to ‘clutter up’ the text with long interlinearized sentences without direct relevance to the phenomenon in question. But all examples can be found as complete sentences with a corresponding number, in appendix A.

Each example is given in 6 lines:

- 1) **analysis:** S^{fr} V OBJ^{exp}
- 2) **Text:** Nĩm đwàm ɲgwakirí nãm,
- 3) **Morphemes:** nĩm đwàm ɲgwa-ki-rí nãm-L
- 4) **English gloss:** water thirst harass-TOT-PF hyenaDF
- 5) **Free translation:** "The thirst for water harassed Hyena,
- 6) **Reference.** txt2:002.....

The first is a combined grammatical and thematic relations analysis, using markers like S^{ag} and O^{pat}, to be read as agentive subject and patientive object respectively. Multiple word constituents are marked on the first word, a new constituent starts where a new marker is placed above a word. Verbs are indexed with a number, with the first verb of the clause marked as V¹, the next V² and so on. The second line gives the Nizaa text in normal orthography. The third line indicates the morphemes of the text; morphemes consisting of a tone only are given as a letter representing the tone, to enhance

⁴ ‘Verbal’ here means verb(s) without particles or subordinated verbal forms in the clause.

readability⁵. The fourth line gives English glosses of the morphemes, and the fifth a free translation. The final line is a text reference to the corpus.

Words (mostly verbs) are always glossed when appearing in the text outside language examples, usually showing one sense, or with some verbs, two or three. This should not be taken to mean that the meaning used as gloss is the only, or the essential, meaning of the word in question. Rather one gloss is used for convenience and ease of recognition, while the word may be quite polysemous in actual use. Such polysemies are sometimes commented upon in the text, where relevant. At this point we will just notify the reader that the meanings of polysemous words are understood to be prototypically organised categories, often related through meaning chains, rather than clear-cut categories with distinct and necessary features.⁶

1.3.2 Other formalisms:

The theoretical framework introduces several technical terms, which are written with an initial capital in the text, in accordance with the original author's convention. When occasionally the same word is used in a non-technical sense, it is not capitalised. Thus e.g. 'Motion' refers to Talmy's use of this term, while 'motion (verb)' refers to the traditional usage of this term in linguistics to refer to verbs like *go* and *run*.

In the analysis part, sentences are rewritten in a prose formalism, using semantic roles, capitalised deep or mid level morphemes, (cfr. 5.4) and technical terms such as Figure and Ground in an otherwise recognisable sentence set-up. These formal versions are based on Talmy's examples. When used to show complex events ('macro-events'), the idea is to connect the two event components as closely as possible, evading structures of subordinate or embedded clauses. The formal version is placed at the end of the discussion of each example.

⁵ e.g. mbêw with a H-L tone appears on the morpheme line as mbéw-L, to avoid the single Low tone marking a definite noun appearing as `.

⁶ Taylor 1995 may be cited as an exponent of the view taken here.

1.3.3 Abbreviations

A list of the abbreviations used in glossing of language examples:

ADV	Adverbial, adverb
ADV:[]	Adverbial clause
ana	Anaphoric morpheme/particle
cm	Citation marker
cm:[]	Complement clause of utterance verb
Dem, dm	Demonstrative
DF, df	Definite, of nominals
imp	Imperative
NP	Nominal phrase
LOC	Locative phrase
log.	Logophoric pronoun, referring to the speaker in reported speech
O	Object
O:[]	Object clause (or complement clause)
PFV, pfv	Perfective aspect marker
pcpl	participle
prs.n.	personal name
pfdetr.	Perfect intransitive (of -rā , a currently relevant state brought about by the verbal action, without an overt object)
pftr	Perfect transitive (of -rī , a currently relevant state brought about by the verbal action, with an overt object)
PP	Post- or pre-positional phrase
qp	Question particle
Rel:[]	Relative clause
S	Subject
Sbn	Subjunction (particle subordinating a clause or phrase)
Semantic roles:	Specificational superscripts on syntactic functions, e.g. S ^{ag}
ag	Agent
ben	Benefactive
exp	Experiencer
frc	Force
instr	Instrument
pat	Patient
recp	Recipient
voc	‘Vocative’, name of an addressee
TOT	Derivational suffix: Total affectedness of Object
v.detr.	verbal detransitiviser
v^{n-sub}	Subjunctive verb-form, used in subordinate clauses, indexed with chain position number

1.4 On the texts

The texts used are, as already noted, for the most part stories and tales. The tales often have certain animals as main characters, like Hare (the cunning hero), Hyena (the greedy and stupid person), Lion (the violent and not too bright person used to exploit others). As is normal in tales, the animals speak and behave as human beings, but keep such characteristics as are useful to the tale, like the monkey’s tail or the hare’s jumping behaviour.

What is more important from the point of view of linguistics is the fact that the tales and stories are narratives with a certain discourse structure.⁷ They usually start out with a short presentation of main characters and setting, and then proceed with the actions performed by these characters, often in chronological order with episodic subdivisions of the text. This is the ‘main line’ of events, for convenience often dubbed ‘storyline’. The storyline may be interspersed with supportive material, often background information. Then there often is some sort of climactic event, a peak, before a conclusion which may contain a ‘moral of the story’ or other devices relating the story to the audience listening to it.

Generally speaking, such narrative structure often has direct impact on e.g. the verbal forms chosen: storyline events tend to be expressed in perfective, and/or past tense, verb forms, while supportive material can be imperfective and/or use present tense verb forms or existential constructions. Other characteristic traits of the main line may be implicit mention of participants, e.g. omission of subject NP in the case of several sentences covering events performed by the same subjects.⁸ Some verb forms in Nizaa probably have their main function as markers of on- and off-storyline events, or in the sequencing of events within an episode of a larger narrative.

Thus the language examples of the thesis, being taken out of their context in some tale or story, may display seemingly subjectless clauses, leave out an expected locative expression or contain a different auxiliary form. Such phenomena are difficult to evade when using real texts, and also should not be evaded, as they are part of a completely normal use of language. Still, a certain restraint in drawing substantial syntactical conclusions from such material is necessary, since in context ways of expression are allowed which would have been impossible out of context, and vice versa.

As our aim in this thesis is to elucidate the occurrence of multiple verbs in the same clause, we shall not be able to comment upon all instances of context-induced phenomena. But the basic notion of main line/supportive material has been found to have relevance for our subject, and thus is referred to in the analysis (cfr. 5.5., and 5 *passim*).

⁷ The following paragraphs are based on Longacre 1983: 1-15.

⁸ The ‘consecutive waw’ verb-forms in classical Hebrew may be an analogue for those familiar with Hebrew grammar.

2 A SHORT OVERVIEW OF NIZAA GRAMMAR

The following pages are not meant to be anything like a full-fledged grammar of the Nizaa language, only an overview to help the reader to navigate in the subject matter of this thesis. The subjects treated are phonology, word order parameters and sentence types, and nominal and verbal morphology. It must also be said that many subjects in the grammar are not as yet sufficiently understood, especially as regards morphology and syntax. Many of the analyses here therefore must be considered as propositions rather than established facts.

2.1 Phonology

The Nizaa language has a fairly complex phonology and tonology, of which we shall present here only the most basic facts: the consonants and vowels, and a few remarks on the tones. The orthography employed in the thesis is the standard orthography developed for this language, with the exception of the marking of complex tones. The orthography is to a large extent phonemic.

In the following paragraphs we shall first present the syllable structure, then the phonemes and finally the tones. The phonological analysis presented in the tables below is based on Endresen 1990: 173-175 and Endresen 1992, with minor changes from my own work on the language. The symbols used in the tables are the standard orthography, with a more accurate transcription using IPA symbols given in square brackets for each symbol. Where nothing but the bracketed version appears, the phoneme has no individual symbol in the standard orthography (see comments on each table).

2.1.1 Syllable-structure

Nizaa has three types of syllable: CV, CVV, and CVC. VV represents a long vowel, and VVŋ a nasalized vowel. V exists only in the particle **a** (various tones). Monosyllabic nouns permits only the CVV and the CVC type, while monosyllabic verbs permits CV, CVV and CVC.

2.1.2 Vowels

There are three types of vowel phonemes, 5 short and oral, 10 long and oral, and 7 long and nasalized.⁹ Specific environments generate the allophonic variation between front and back pronunciations of /i, e, u, o/. /a/ has the same pronunciation in all environments.

⁹ Endresen 1992: 173 and 1990/9: 35 discuss a possible 8th nasalized long vowel found among older speakers of Nizaa.

Table 2-1 Short vowels

<i>Unrounded</i>	<i>Rounded</i>	
i [ɪ ɯ]	u [ʊ ʏ]	<i>Close</i>
e [e ɤ]	o [o ø]	<i>Mid</i>
a [a]		<i>Open</i>

Table 2-2 Long vowels, oral and nazalized

<i>Front Unrounded</i>	<i>Back Unrounded</i>	<i>Back Rounded</i>	
ii [i:]	uu [u:]	uu [u:]	<i>Close</i>
ee [e:]	əə [ɤ:]	oo [o:]	<i>Close-mid</i>
εε [ɛ:]	αα [ʌ:]	ɔɔ [ɔ:]	<i>Open-mid</i>
aa [a:]			<i>Open</i>

<i>Front Unrounded</i>	<i>Back Unrounded</i>	<i>Back Rounded</i>	
iiŋ [ĩ:]	uuŋ [ũ:]	uuŋ [ũ:]	<i>Close</i>
εεŋ [ẽ:]	ααŋ [ã:]	ɔɔŋ [õ:]	<i>Open-mid</i>
aaŋ [ã:]			<i>Open</i>

2.1.3 Consonants

There are two major consonant phoneme systems, one for syllable onset and one for syllable coda. The syllable onset system contains 61 phonemes, and the coda system 10.

Onset system: The two glottal stops are so marginal as to never be written in orthography¹⁰. The same applies for the dorsal [x], it is marginal (one lexical item) and collapsed with /h/ in orthography. Other differences with Endresen 1990/91, 1992, are the addition of the three phonemes /fw/, /vb/, and /gh/. Of the three, two are lexically marginal: /vb/ is used only in ideophones, and /gh/ appears only in intervocalic position in disyllabic single morphemes and thus differentiates them from compounds. The large number of phonemes is partly due to a doubling of many consonants with labialized counterparts (23 labialized consonants, not counting /w/).

Coda system: Two of the coda consonants have marginal status: /d/ and /y/ are mostly found in loanwords and ideophones.¹¹

¹⁰ The only frequent items where these two phonemes appear, are the 3rd person plural pronoun of one dialect, but in standard orthography the form from another dialect is used, with 6 and 6w instead of glottal stops.

¹¹ [ɟ] listed by Endresen has received another analysis as /yiŋ/ in the only known occurrence (ideophone).

Table 2-3 Syllable onset consonants

<i>Labial</i>		<i>Apical</i>		<i>Laminal</i>		<i>Dorsal</i>		<i>Labial-dorsal</i>		<i>Glottal</i>
p	[p]	t	[t]	c	[tʃ]	k	[k]	kp	[kp]	[ʔ]
		tw	[tʷ]	cw	[tʃʷ]	kw	[kʷ]			[ʔʷ]
b	[b]	d	[d]	j	[dʒ]	g	[g]	gb	[gb]	
		dw	[dʷ]	jw	[dʒʷ]	gw	[gʷ]			
ɓ	[ɓ]	ɗ	[ɗ]							
ɓw	[ɓʷ]	ɗw	[ɗʷ]							
mb	[mb]	nd	[nd]	nj	[ndʒ]	ŋg	[ŋg]	mgb	[ŋmgb]	
		ndw	[ndʷ]	njw	[ndʒʷ]	ŋgw	[ŋgʷ]			
m	[m]	n	[n]	NY	[ɲ]	ŋ	[ŋ]			
mw	[mʷ]	nw	[nʷ]	nyw	[ɲʷ]	ŋw	[ŋʷ]			
mv	[ɱv]			nz	[nz]					
				nzw	[nzʷ]					
f	[f]			s	[s]	h	[x]			h [h]
fw	[fʷ]			sw	[sʷ]					
				sh	[ʃ]					
				shw	[ʃʷ]					
v	[v]			z	[z]	gh	[ɣ]			
				zw	[zʷ]					
		l	[l]			y	[j]	w	[w]	
		lw	[lʷ]			yw	[ɟ]			
vb	[β]	r	[r]							
		rw	[rʷ]							

Table 2-4 Syllable coda consonants

<i>Labial</i>	<i>Apical</i>	<i>Dorsal</i>	<i>Labial-Dorsal</i>
b [p, b]	d [t, d]	g [k, g]	
m [m]	n [n]	ŋ [ŋ]	
		y [j]	w [w]
			ŋw [ɰ]
	r [r]		

2.1.4 Morphophonology

A morphophonological process may lower all vowels to /a/. If the original vowel is rounded this rounding “survives” on the preceding consonant. The process is mainly found in unproductive verbal derivations and in irregular noun plurals, see below for examples (Endresen 1990/91: 176-178).

There is furthermore a process of coda weakening in Nizaa, with a regular alternation between strong-grade and weak-grade codas. The process is readily seen in verbs, where the alternation more or less follows the Perfective – Imperfective distinction: the imperfective forms (ending in the suffix – *ci*) always have weak-grade coda, while the perfective forms of most verbs have the strong grade. The process also lengthens and modifies the vowel quality of the short vowel of the perfective form verb root. In the table below, AA equals long, “modified,” oral vowel, while AAη equals long, “modified”, nasalized vowel, with verb root examples.

Table 2-5 Coda weakening

	1	2	3	4	5
<i>Strong Grade of coda:</i>	Vb	Vm	Vn	Vg	Vη
<i>Weak Grade of coda:</i>	Vw	Vηw	AAη	AA	AAη
<i>Examples:</i>	‘exit’	‘be.solid’	‘cultivate’	‘disperse’	‘eat’
<i>Strong Grade of coda:</i>	dib	taηw	dan	tag	taη
<i>Weak Grade of coda:</i>	diw	tam	dæeη	táá	taαη

2.1.5 Tones

We cannot but touch upon the extremely rich tonology of Nizaa in this paper. Since our main concern is elsewhere, only the representation of the tones as used in the thesis is presented below, while the system of tone sandhi is not extensively discussed except for a few remarks on tone transport.

The tones are represented differently in the different syllable types for practical reasons. The standard ortography differs from the notation of tones used here by splitting apart complex tones, representing e.g. L-H as /*dīw*’/ instead of /*dīw*/, to enhance readability and diminish the number of diacritics needed to write the language. Due to the software used to write Nizaa here, a certain splitting up of the triple tones was unavoidable, since no triple-tone symbols was available (Keyman from Tavultesoft with the CamCamSILDoulos font).

There are three tone levels, high (H), mid (M) and low (L). These appear singly or are combined to complex tones. It will be clear from the table that all vowels are marked for tone (zero marking M tone). Downstep is present as a lowering of H tones in certain environments, but is not written in the ortography used in the thesis.

Tones of the final syllable of one word will affect the tone of the following word in specific ways. A general rule is the transfer of a H tone to a M or H tone following word. In its original position such a H tone may be ‘floating’, i.e. not realized when the word is pronounced in isolation. A following syllable of L tone will make such a floating tone appear on the syllable where it belongs. All in all L tones stop short any tone transport, and they generally stay in place themselves, thus acting as fixed points in the tonal contouring.

Endresen 1992 presents a nearly complete analysis of the tonology of nouns in Nizaa while a comparable analysis of the verbal tonology has not been carried out. Since verbs are the central theme of this thesis, we will state a few basics.

Unlike the numerous lexical tones of nouns, verbs have only two possible lexical tones, H and M, behaving tonally different in a principled way in the verbal paradigm. More importantly, tone plays a role as marker of verbal forms in the paradigm, but many of these tone morphemes are not as yet sufficiently studied. We do not in any case make much use of them in the ensuing analysis of Nizaa verb chains, since we are mostly concerned with the lexical meaning of the verb roots and not with the finer points of aspect and mode.

As in the case of nouns, verbs can ‘take over’ a H tone from a preceding syllable, thus appearing with another tone than its lexical tone. A typical environment where this phenomenon is seen with words from any part of speech, is after the citation marker *ǎ* ‘said, saying’, where the H tone part of the complex regularly pass over to the following syllable unless this has L tone. A following H tone will not change, but a M tone will become H or H-M, depending on length of vowel, number of syllables in the word, etc.

One short note on lexical tone in verb chains: Sometimes a H tone is attached to M-tone verbs appearing before another verb in a chain, as for instance *ge* ‘go’ in *gecírě* ‘go-pres-v.detr.’ becomes *gě* in *gě juuncírě* ‘go-go.back-pres.-v.detr.’. This can be seen as indicative of a compounding process.

Table 2-6 The representation of tones

<i>Tone</i>	<i>CVV</i>	<i>CVC</i>	<i>CV</i>
H	táá	tám	tá
M	taa	tam	ta
L	tàà	tàm	tà
LH	tàá	tǎm	tǎ
HM	táa	tām	tā
HL	táà	tâm	tâ
MH	taá	tǎm	tǎ
ML	taà	tâm	tâ
LHM	tǎa	tǎm̃	tǎ̃
LHL	tǎà	tǎm̃	tǎ̃
MHL	tǎà	tǎm̃	tǎ̃

2.2 Word order and sentence types.

Nizaa is a SVO language, with Subject-Verb-Object as the canonical main clause word order. In Nizaa, the verb is the central predicate of the clause. The verbal constituent can be filled by one finite verb or by a row of up to 4 verbs, called respectively a simplex or a chain. To avoid confusion, the

standard term VP ‘verbal phrase’ is not used in the thesis, since we do not want to include objects etc. when speaking of the verbal constituent further on.

It is of some importance to note that Nizaa is a language making extensive use of zero anaphora in context (Payne 1997: 170). A participant already established in context will often not be overtly mentioned in the sentence, making seemingly subject-less or object-less sentences.

Basic word order is SVO, but other sentence-types are extant as well, and some further specification of the basic order must also be made. We comment shortly on object positions, negations, modal construction and subjunctive, and the auxiliary **a**, starting with the last item.

The auxiliary a

The auxiliary **a** with various tones must be commented upon. As **á**, it is used in existential and ostensive constructions, attributive clauses and predicate locative constructions. In this capacity it has H tone and can be described as ‘copula’. Its negation is **fá**, ‘exists not’.

Table 2-7 Copula á

	<i>Ostensive</i>	<i>Existential</i>	<i>Attributive</i>	<i>Predicate locative</i>
<i>Copula constr.</i>	Á sìi.	Sìi á kē.	Sìi á gìw.	Sìi á kaárē.
<i>Gloss</i>	‘It is a house.’	‘There is a house.’	‘The house is big.’	‘The house is over there.’
<i>Negations</i>	Á sìi fá .	Sìi fá .	Sìi á gìw fá .	Sìi fá kaárē
<i>Gloss</i>	‘It is not a house’.	‘There is not a house.’	‘The house is not big.’	‘There is no house over there’

The auxiliary in periphrastic verb forms

The auxiliary is also used to construct periphrastic verb forms. One unambiguous periphrastic forms is progressive with the copula and the subjunctive verb form. Another is a future form with H tone auxiliary and verb + detransitive suffix. There are also other forms, but we are unfortunately unable to comment on them all within the limits of this thesis.

Examples of the periphrastic progressive and future are given in the table below.

	<i>Progressive</i>	<i>Future</i>
<i>Periphrastic verb constr.</i>	Nìi á sààwà	Nìi á sàarē
<i>Gloss</i>	‘The person is washing.’	‘The person will wash.’
<i>Negations</i>	Nìi á sààwà fá.	Nìi sàá-ŋa
<i>Gloss</i>	‘The person is not engaged in washing.’	‘The person will not (ever) wash.’

Objects and Negations

In main clauses with no objects, a set of detransitivity markers (**–rē** and **–rā**) is used at object position, barring any further arguments from appearing. The verb may be either inherently intransitive

or only used with no overt object. In main clauses with two objects, the object with Recipient or Benefactive role ('indirect object' will precede the Patient Object ('direct object')).

Negations markedly affect word order, by requiring the verbal constituent to be clause-final, thereby forcing objects forward, and changing sentences to SOV order. The order of indirect object preceding direct object will be kept, though.

A similar word order rearranging effect is seen with the 'modal construction', so called because it employs verbs with a more or less 'modal' meaning in a matrix clause and another verb in a complement clause. The subordinate verb has a special form, the subjunctive, characterized by L tone on the verb root and the suffix **-wà**. Examples of the ordinary main clauses with transitive and intransitive verb, with and without detransitivizer, with verb chain and indirect object and with 'modal construction', are given in the table below.

Figure 2-1 Word order examples

<i>Intransitive verb:</i>	<i>Nizaa sentence</i>	<i>Translation</i>
S V –rē	Mi gecíré. I go-impf-detr.	'I go.'
S V loc	Mi gecí sìnà. I go-impf house-in	'I go to the house.'
S VV IO	Mi ge nicí nìi làw. I go give-impf person dem	'I go for that person.'
S mod O Vsub	Mi gecí sìn sààwà. I go-impf house wash-sub	'I go to wash the house.'
<i>Transitive verb:</i>		
S V –rē	Mi saacíré. I wash-detr	'I wash.'
S V DO	Mi saací sìn. I wash-impf house	'I wash the house.'
S VV IO DO	Mi saa nicí nìi làw sìn. I wash give-impf person dem house	'I wash the house for that person.'
S mod IO DO Vsub	Mi yééwú nìi làw sìn saa nìwà. I will-stat person that house wash give-sub	'I will wash the house for that person.'

Other word order parameters

Other relevant word order parameters are quite varied. Associative syntagms have modifier – head word order, (possessor- possessed), often marked only by this order. Pronouns with reference to the possessor is sometimes inserted, especially in the case of kinship terms. Adjectives, demonstratives and number words follow the head noun, unless the noun is deverbal and has an object-like specifier. Relative clauses follow the head noun, often without any overt marking. There are a number of postpositions and at least one preposition. Finally there is a locative suffix on nouns.

A number of nouns with this suffix are used as postpositions in their tour. The table below shows some of this word orders.

Table 2-8 Word order examples in nominal constructions

<i>Associative construction</i>	mbírám ndùùŋ child sack “the child’s sack”	mbírám ŋu táá child his father “the child’s father”
<i>Noun & Adjective</i>	nyáni nízáà language nizaa “the Nizaa language”	
<i>Noun & modifier</i>	nìi làw person demonstrative “this/that person”	ndwèéŋ ɔɔŋ taara lɔàŋ man-pl 10 3 demonstr.-Pl “these 30 men”
<i>Noun & Deverbal noun</i>	ním dɔwám water thirst ”water-thirst”	
<i>Noun & noun</i>	sìi yím house medicine “hospital”	nìi nwààŋ person fight “fighter”
<i>Noun & relative phrase</i>	nìi nwààŋ njéwà fà díwuré person fight tires not come-Pf-detr “a person who does not tire of fighting, has come”	
<i>Prepositional phrase (comitative)</i>	wú wân with chief “with the chief”	
<i>Postpositional phrases</i>	kwééŋ ndààŋ ndéŋw bush middle “in the middle of the bush” sìi fààŋ house back “behind the house” wûr ndiŋ field in “in the field”	fèéŋ ndààŋ-ndéŋw dry.season middle “in the middle of the dry season” wân jèè chief at (French: chez)” “at the chief’s” wân bàw chief for “for the chief”
<i>Noun&locative suffix used as postpositions</i>	sìi yèèŋnà house side-loc “besides/on the side of the house” cún ɓirâ tree head-loc “in the three-top”	cún gwárâ tree trunk-loc “under the tree”

2.3 Nouns

Nouns may be both monosyllabic and polysyllabic. Definiteness is marked by the addition of a L tone. Not all lexical tone patterns are shown in the table below.

Plural is marked with /-wu/ for animate nouns (humans, animals) and /-ya/ for inanimates. A plural entity is not necessarily morphologically marked for number, a number word or a plural demonstrative can do the job. Humans are the most likely entity to be morphologically marked for plural.

Table 2-9 Regular nouns

<i>Gloss</i>	<i>Singular</i>	<i>Definite</i>	<i>S+demonstr.</i>	<i>Plural, 2 or pl</i>	<i>Pl+demonstr.</i>
<i>house</i>	sìì	sìì	sìì làw	sìì ɓaara	sìì lààŋ
<i>tree</i>	cún	cún	cún làw	cún ɓaara	cún láàŋ
<i>monkey</i>	mbéw	mbêw	mbéw làw	mbéw ɓaara	mbéw lààŋ
<i>pot</i>	njèè	njèê	njèè làw	njèèyâ	njèè láàŋ

A few nouns have an irregular plural. Some of these nouns are cited below, to exemplify both the process of vowel lowering and coda weakening, and the attachment of the L tone marker for definiteness.

Table 2-10 Irregular nouns

<i>Gloss</i>	<i>Singular</i>	<i>Singular definite</i>	<i>Plural</i>	<i>Plural definite</i>
<i>person</i>	nìì	nìì	nàw	nàw
<i>man</i>	ndũñ	ndũñ	ndwèëŋ	ndwèëŋ
<i>woman</i>	njān	njān	njeëŋ	njeëŋ
<i>child</i>	mbíram	mbíráñ	mbírarí	mbírarí
<i>son/daughter</i>	ŋun	ŋũn	ŋweeŋ	ŋweeŋ
<i>thing</i>	yéŋw	yêŋw	yáŋw	yâŋw

There is no case-marking for nouns, with the possible exception of the locative element /-nã/. Endresen 1990/91 regards it as probably enclitic (p.181). It has the allomorph /-rã/ in certain environments (nouns ending on -r), and the M tone may be affected by the tone of its host and become HL instead of ML. It marks a noun as a location for a non-moving entity (in, on) or as a goal or path for a moving entity (into, onto, to). As we have seen above, a noun made locative by this suffix, may be used in a postposition-like way.

2.4 Pronouns

The main set of pronouns will be listed in three forms: as isolated words, as they appear in context and compounded with the auxiliary **á**.

<i>Denotation</i>	<i>Pausal form</i>	<i>Context form</i>	<i>Pronoun + Aux</i>
1 singular	mi	mi	maá
2	wi	wu	waá
3	ŋwi	ŋu	ŋwaá
1 Plural	yí	yí	yáá
2	nywí	nyú	nywáá
3	ɓwi	ɓu	ɓwaá

Other pronouns occasionally used are the following groups. Logophoric is used in reported speech, representing the speaker.

<i>Type</i>	<i>Denotation</i>	<i>Context form</i>
Logophoric	Singular	yí
	Plural	yíwú
Vocative	2 plural	ɗíwu
Expanded	3 plural	ɓúsúúŋwu
honorific	3 singular	nùro (from nìi-ro)
	3 plural h	nàro (from nàw-ro)

2.5 Verbs and verb morphology

Verb roots in Nizaa are monosyllabic. A large number of verbs present the weak-grade – strong-grade alternation. A number of verbs have only weak-grade form, but those that evince strong-grade forms must also have weak-grade form. Verbs can have a M or a H lexical tone, as noted above. The root can be augmented with a number of derivational suffixes, and inflected with suffixes. Periphrastic forms making use of the auxiliary **á** / **ã** / **a** etc further expand the paradigm, as we noticed above.

2.5.1 Verbal derivations

We shall first give an overview of the derivational processes and suffixes of Nizaa verbs, and then inflections. Most of the following is based on an unpublished paper by Endresen (2001), but rearranged and shortened to serve the present purpose of introduction to the grammar of Nizaa.

The exact number of verbal derivational suffixes in Nizaa is quite difficult to determine. In the first place, there is a problematic boundary between inflectional and derivational suffixes, and secondly it may be difficult to distinguish derivation from compounding, as we will have ample opportunity to observe on in later chapters of this thesis. In the present section we shall only discuss the first problem, though.

Nizaa has got verbal derivational number, which is expressed in one of two ways, showed in table 2-11. It is not very productive processes, but will occasionally be used.

Table 2-11 Verbal derivational number

SINGULAR FORM	PLURAL FORMED BY
CV	suffixation of -r
CVC	Vowel lowering
CVV	(Reduplication?)

As the following examples show, verbal number concerns either the action or the arguments. In the first case the singular form denotes one single action and the plural form denotes many actions. When verbal number concerns the arguments, it has an ergative patterning: the one argument that is required to be singular or plural is the subject with intransitive verbs and the object with transitive verbs.

Table 2-12 Verbal number denoting number of actions

SINGULAR		PLURAL	
ki	to cut (once)	kir	to cut (many times)
nze	to tear (once)	nzer	to tear (many times)
njúb	to strike (once)	njwáb	to strike (many times)

Table 2-13 Verbal number denoting number of arguments

SINGULAR		PLURAL	
njó	to be plunged (S:sg)	njór	to be plunged (S:Pl)
dib	to exit (S:sg)	daw	to exit (S:pl)
mgbi	to tear apart (O: a rope)	mgbir	to tear apart (O: many ropes)
shen	to strike (O:sg)	sheen	to strike (O:pl)

All other derivations are suffixes; there can be up to 3 such suffixes attached to the verb root. The derivational suffixes also share the property of having no inherent tone. Tone markings on derivational suffixes will either stem from tone sandhirules, or be tonal morphemes (e.g. imperative). In the following, semantic roles are used instead of syntactic categories as subject and object when commenting on the different suffixes.

Directional derivations

One group of derivations typically specify a Path notion of a motion verb, and can be labeled directionals. They do not necessarily increase the semantic valence of verb roots, though they may have this effect with verbs not inherently denoting motion.

- a ‘illative’, motion into an enclosure
- ri , ‘allative’, motion towards a location, often the deictic centre of the sentence
- wa , ‘distantive’ motion away from a location, or from the deictic center,

-sa, ‘down’, motion towards a lower location.

Other suffixes

The next item to mention is **-ki** ‘completive’, also called the *totality* suffix. Its status as derivation is not unproblematic, as it is close to an aspect marker. The main argument for categorizing it as a derivational suffix is its lack of independent tone. It indicates total affectedness of the absolutive argument, that is the subject of an intransitive verb and the object of a transitive verb. It is generally used only with the strong-grade root-form. A sizeable group of verbs do not take this suffix.

As for internal order of the derivations, **-a** ‘illative’ will be closest to the root and then **-ki** ‘completive’ often comes, followed by one of the others, **-ri**, ‘allative’, **-sa**, ‘downwards’ or **-wa**, ‘ablative’. **-ri** and **-wa** may occur before or behind **-ki**.

2.5.2 Inflections:

Inflectional suffixes will appear after any derivations. They are first and foremost aspect markers, and the first 4 are mutually exclusive.

Positive polarity:

-cí ‘habitual/imperfective’, usually with the weak-grade root-form, but may occur with strong-grade roots already derived with **-ki**.

-wú ‘perfective/stative’, used sometimes of states, otherwise denoting perfective actions.

-rá ‘perfect detransitive’, often co-occurs with **-ki** ‘completive’, bars the mention of any further arguments of the verb. Do not change the semantic valence of the verb as such.

-rí ‘perfect transitive’, the transitive counterpart of **-rá** ‘perfect intransitive’, must be used if any further arguments shall be present in the sentence.

-ri ‘progressive’ (only occurring after **-cí** ‘habitual/imperfective’)

-L ‘imperative’, marked with tone

Other suffixes are the ‘participle’ suffix **-ná**, which also occurs in final position. It is not an inflection, rather it forms a nominalized form that can be used in an adjective-like way.

The **-ré** ‘detransitivizer’ suffix needs closer consideration. It is rather a clitic than an inflection, sometimes occurring as a free word. It has the same detransitivizing effect as the perfect intransitive marker above, but can be added to most of the other suffixes.

The pattern of derivational suffixes followed by inflections is broken by the imperative suffix: it consists of a low tone attached directly to the verb root, before any derivations. It affects the tone of a following derivational suffix.

Another ‘non-finite’ form is the subjunctive suffix, regularly occurring in the modal construction mentioned above. Finally we will mention **nú** ‘first, yet’, a clitic that may be inserted

after derivations and before negative clitics. All of these suffixes are shown with the H tone verb **pín/píñ** ‘make, do’ in table 2-14 below. Finally, the suffixes with negative polarity is listed in table 2-15.

Table 2-14 Positive derivations and inflections

Imperativ	pín rē!	-L	Do/make that!
Imperfect. detrans.	píñcí-rē	-cí-rē	does/makes that
Imperfective trans.	píñcí yéñw dāà	-cí	does/makes some thing
Imperf. progressive	píñcírí-rē	-cí-rí	is doing/making some thing
Perfective progress.	pínwú yéñw dāà	-wú	did/made some thing
Perfect transitive	pínkírí yéñw dāà	- rí	has done/made all of a thing
Perfect intransitive	yéñw dāà pínkírā	-rā	a thing completely done/made
Perfective, ‘first’	yéñw dāà pín nú -rē	nú	a thing to do/make first/before others
Participle	yéñw pínwúnā	-nā	the thing that was done/made
Subjunctive	yééwá yéñw dāà pìñ	-wà	want to do/make a thing

Table 2-15 Negative polarity (clitics or inflections)

‘imperfective negative’	-à fá	–is not so
‘perfective negative’	-ñwa	–did not happen
‘temporally limited negative’	-jaa	–not any longer’
‘temporally limited negative’	fá/fí jàà	–not existence any more
‘irrealis negative’	-ña or -ααñ	– something which will never happen
‘imperative negative’ !	pe	- prohibition, do not

Concluding remarks

Though the subject of verbal morphology in Nizaa by no means is exhausted by the preceding section, we shall go no further for reasons already mentioned. Suffice it to say that one way of regarding the subject of this thesis, the verb chains, is as an extremely productive process of compounding. In the following chapter we shall examine somewhat closer the formal characteristics of these structures.

3 MULTIPLE VERBS IN NIZAA CLAUSES

Moving over to describing multiple verbs in Nizaa clauses, it is convenient to give a short description of the phenomenon in question, this will be done in 3.1. Thereafter we shall note some frequencies pertaining to the occurrence of multiple verbs in 3.2 and look at distribution patterns of verbs in the two-verb chains, 3.3.

3.4 will examine Nizaa chains from a morphological point of view, trying to decide whether they should be regarded as serial verbs or as compounds. 3.5 then sums up this discussion and poses some pertinent questions to be addressed by the next chapters.

3.1 Formal characteristics

A sentence in Nizaa may contain up to 4 verbs in a row. We shall label this chained verbs, rather than verbal series. They appear as roots, and both strong-grade and weak-grade root-forms are found in chains. Lexical tone of the verbs¹² is usually, but not always retained.

Any derivations or inflections are attached to the last verb of the chain, with the notable exception of **ni** 'give', which often appear between the derivational and the inflectional suffix¹³.

A formal 'rough-draft' of a chain can be written thus:

$$V^1 \dots V^4 (-\text{DER}^{1\dots3})(-\text{INFL}^{1\dots2}).$$

If the last verb is **ni**, it will give:

$$V^1 \dots V^3 (-\text{DER}^{1\dots3}) \text{ ni } (-\text{INFL}^{1\dots2}).$$

It must also be noted that inflectional suffixes are not necessarily present in a clause. The verb(s) are often left as bare root forms, or with derivational suffixes only. The forms can in such cases be said to be perfective.

It is important to note that in the way we define concatenated verbs, no other words are allowed to appear between the verbs of a chain. If any other element is present, such as an object or locative phrase, it is not a chain in the sense we are assuming here. We also take the clitic **-rē** 'verb detransitiviser' to break up a chain if it occurs between two adjacent verbs.

¹² Lexical tone of Nizaa verbs is either High or Non-high, according to Endresen 1992: 43, the verbs presenting a less complex tonology than the nouns.

¹³ Two other verbs possibly occurring in this position will also be discussed.

1) below exemplify this structure. The whole sentence contains 3 two-verb chains. The first clause is a main clause with a two-verb chain, the second clause is a single-verb clause with an embedded unmarked relative clause containing a two-verb chain, and the last clause is a modal clause with a chain as subordinate verb.

1) S ^{exp}	V ¹	V ²	S ^{exp}	V ¹	O ^{pat}	[S ^{pat}
ŋu wààwu	se	kekirá,	ɓulaàŋ	sewu	mbân kùù	fɔ̀ɔ̀
ŋu wàà -wu	se	ke -ki -rā	ɓu laàŋ	se-wũ	mbân kùú	fɔ̀ɔ̀-L
3s grandchild-pl	see	know-TOT-PFdetr.	they these	see-past	place	grandpa staff-DF

V ¹	V ²	]	V ¹	NEG	O ^{recp}	V ¹	V ^{2-sub}
ɗag gewunâ,	yééwú-ŋwǎ		kùù			kpáán	nìwà.
ɗag ge-wũ-nà	yéé-wũ-ŋwa		kùú			kpán	ni-wà
fall go-past-pcpl	will-stative-not		grandpa	talk		give-sub	

" His grandchildren have seen and know, they saw the place grandpa's staff went and fell into, they do not want to tell him."

s42:004

Several important features of the Nizaa chains are illustrated in 1). First that they occur both in main clauses and in embedded clauses, second that verbs with **-wà** ‘subordination marker’ or **-nà** ‘participle marker’ can be augmented to a chain, and thirdly that chains occur in both intransitive and transitive clauses.

3.2 Frequencies

There are 128 clauses in the corpus containing more than one verb, including 15 chains used in constructions with a subjunctive verb, be it in the V¹ or the V^{2-sub} place, and 8 chains in periphrastic constructions.. The great majority, 109 instances, contain two verbs, 16 contain three verbs, while 3 contain four verbs in the same clause.

Some verbs are clearly more frequent than others in these constructions. We shall list the occurrence of verbs in different positions in 2-verb chains, in 3-verb chains and in 4-verb chains. The verbs are listed in order of frequency totally in chains, but in alphabetical order within each subgroup of equal frequencies.

The right most column shows use as a single verb in the corpus, this column is repeated throughout the tables for ready reference. The small size of the corpus will necessarily entail that some verbs cannot be shown to have independent use outside chains. In some cases I positively know that such use exists, such verbs are marked with E. In other cases I do not have any written or remembered material, these are marked with a *. The last group thus contains two possibilities: the verbs in it are not used independently outside chains, or I just have not happened to come across them.

Table 3-1 Two-verb chains

	<i>Verb</i>	<i>Meaning</i>	<i>Chain use total</i>	<i>2- verb chains</i>	<i>Pos. 1</i>	<i>Pos. 2</i>	<i>Simplex use</i>
1	jɪŋ/juʊŋ	return; redo	28	19	1	18	*
2	ni	give	22	18	3	14	2
3	ge	go	16	11	6	5	14
4	dib/diw	exit	11	8	4	4	1
5	ba	finish	7	6		6	1
6	kwaŋw	ascend	7	5		5	*
7	ndón/ndóón	pass; surpass	7	7	1	6	3
8	yaʊ	be.together; gather	7	6	1 ¹⁴	5	1
9	yɛɛ	change.location;	6	4		4	*
10	ḡóg	call; shout	5	5	5		11
11	ḡag	fall	5	5	4	1	1
12	ḡii	put; leave	4	4	2	2	3
13	reŋw	arrange	4	4		4	1
14	taŋ/taʊ	eat	5	4	4		2
15	yer	begin	4	4	1	3	6
16	loo	run	4	1	1		E
17	yáú	rise; work	4	1	1		2
18	cɛɛ	descend	3	3	3		E
19	fuu	be.satisfied (of food)	3	3		3	2
20	gan	say	3	3	3		E
21	ke	know;	3	3		3	3
22	kpán	tell	3	3	3		1
23	se	see	3	2	1	1	2
24	ka	take	3	1	1		2
25	baŋ	be.beautiful	2	2		2	E
26	cim	jump	2	2	2		E
27	di	come	2	2	2		12
28	fum	cut.clear	2	2	2		2
29	jaŋw	fight	2	2	2		E
30	ké	jump; start	2	2	2		E
31	nzaŋ	be.clear, be.clean	2	2	1	1	1
32	see	be.clear, be.red	2	2	1	1	1
33	síí	spend.day	2	2		2	*
34	suŋ	drink	2	2	1	1	E
35	túg	spit	2	2	2		E
36	ḡur	cut.open	2	1	1		E
37	kwɛɛ	find	2	1		1	5
38	mgbee	arrive	2	1		1	5
39	nyin	speak	2	1	1		1
40	nyín/nyíín	stand	2	1	1		2
41	pan	carry	2	1	1		E
42	tam	be.mature, be.hard	2	1		1	1
43	ḡáú	swish (make.sound)	1	1	1		*

¹⁴ This verb is used once reduplicated with an intensifying of the meaning 'gather, come together'.

44	ḍúúŋ	close.up (of mouth)	1	1	1		*
45	ḍéŋw	brew	1	1	1		E
46	gbáá	be.fed.up.with	1	1	1		E
47	gbom	scoff.at	1	1	1		*
48	gur	buy	1	1	1		1
49	gwa/gwee	sit; stay	1	1	1		E
50	gwaw	suffer, be.ill	1	1	1		E
51	haaŋ	yawn	1	1	1		2
52	kag	attach	1	1	1		E
53	kí	cut	1	1	1		E
54	kúú	die	1	1	1		5
55	kwaw	greet	1	1	1		E
56	mbúú	throw	1	1	1		*
57	múúŋ	disappear	1	1	1		*
58	mwáw	hire	1	1	1		1
59	ŋgwee	brag	1	1	1		*
60	nuŋ/nuuŋ	lie	1	1	1		4
61	nyaa	rest	1	1		1	E
62	nyáw	disappear	1	1	1		E
63	pín/píŋ	do; make	1	1	1		3
64	ráá	whisper	1	1	1		E
65	ran	vanish, be.lost	1	1		1	E
66	sáá	hook	1	1	1		E
67	shwáŋw	dry	1	1	1		*
68	si	be.black	1	1		1	E
69	sáá	stab	1	1	1		*
70	soo	broil	1	1	1		E
71	sun	look.at	1	1		1	E
72	suu	cook	1	1		1	E
73	sweeŋ	ask	1	1	1		6
74	taa	shoot (bow&arrow)	1	1	1		E
75	taa	weave	1	1	1		1
76	tíŋ	show	1	1	1		E
77	tóó	ladle.up	1	1	1		E
78	túr	rake.weeds	1	1	1		2
79	túú	raise (poultry, slaves)	1	1	1		*
80	twééŋ	swear	1	1	1		E
81	vwáw	snort.while.drinking	1	1	1		*
82	yeg	separate	1	1	1		E
83	yéé	will; want	1	1	1		
84	záá	swing;dangle	1	1	1		*
85	zí	be.numerous (people)	1	1	1		*
86	zím	be.much (weeds)	1	1	1		*

Table 3-2 Three-verb chains

	<i>Verb</i>	<i>Meaning</i>	<i>Chain use total</i>	<i>3- verb chains</i>	<i>Pos.1</i>	<i>Pos.2</i>	<i>Pos. 3</i>	<i>Simplex use</i>
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1	jɪŋ/jʌŋ	return; redo	28	9		1	8	*
2	ni	give	20	4			4	2
3	ge	go; part	16	4	3	1		14
4	dib/diw	exit	11	3		3		1
5	kwaŋw	ascend	7	1		1		*
6	yááŋ	be.together; gather	6	1		1		E
7	yee	change.location	6	1		1		*
8	loo	run	4	3	3			E
9	yáá	rise; work	4	3		3		2
10	ka	take	3	2	2			2
11	se	see	3	1			1	2
12	du	advance	2	1	1			1
13	jib/jiw	roam	2	1			1	*
14	kwée	find	2	1		1		3
15	mgbee	arrive	2	1		1		E
16	nyin	speak	2	1		1		1
17	pan	carry	2	1	1			E
18	bur	cut.open	2	1	1			E
19	ḡee	rescue	1	1			1	E
20	goo	chop	1	1	1			1
21	taa	disperse	1	1			1	1
22	ten	sever	1	1		1		1
23	viin	be.angry	1	1	1			E
24	déb	be.in.crowd	1	1		1		*

Table 3-3 Four-verb chains

	<i>Verb</i>	<i>Meaning</i>	<i>Chain use total</i>	<i>4-verb chains</i>	<i>Pos. 1</i>	<i>Pos. 2</i>	<i>Pos. 3</i>	<i>Pos. 4</i>	<i>Simplex use</i>
1	ge	go; part	16	1			1		14
2	ba	finish	7	1				1	1
3	kwaŋw	ascend	7	1		1			*
4	yee	change.location	6	1			1		*
5	du	advance	2	1	1				1
6	jib/jiw	roam	2	1				1	
7	nyín/nyíŋ	stand	2	1	1				2
8	tam	be.mature, be.hard	2	1				1	1
9	baa	seek	1	1	1				3
10	shiw	be.strong	1	1			1		
11	da	stand.legs.apart	1	1		1			
12	taŋ/taŋŋ	eat	5	1		1			2

3.2.1 Comments on the tables:

The corpus contains 43 verbs occurring at least two times in chains and 53 occurring only once in chains. (In addition comes other verbs only used singly, they are not brought into the tables.)

The tables show that there is a group of verbs with a strong tendency of final position occurrence. They are among the most frequent verbs in chains. Another small group of high frequency has a tendency to occur in both final and non-final positions. The large group of verbs used only once in chains in this corpus, largely occurs in the first position. Another general tendency is that verbs that have a comparatively high frequency in first position also have a fairly high frequency of use in single-verb clauses.

The size of the corpus restricts the use of such numbers to a certain degree. However, there is enough material to provide some interesting leads in the further treatment of Nizaa verb-chains. We will in the following section look at the groups and their distribution pattern in chains. Since the 2-verb chains are by far the most numerous, we will start with them and then build on the patterns found within them to investigate 3-verb and 4-verb chains.

3.3 Distribution patterns in 2-verb chains

We have noted the fact that a large number of verbs occur in first position, while final position seems to have a more restricted set of verbs occurring in it. The following tables are not meant to be 'absolute', but rather show tendencies of distribution. Thus verbs with a comparatively small number of occurrences in another position than its typical place are not listed as mixed.

We shall first list which verbs are most frequent in final position, and also what verbs follow when they occasionally do not occur in this position, Table 3-4. Then we shall look at verbs with a clearly more mixed distribution pattern, in two tables showing first position and second position use (final and non-final), with following verbs and preceding verbs respectively, Table 3-5 and Table 3-6. Verbs tending towards a distribution pattern of first position are listed in Table 3-7, with following verbs shown.

Verbs which only occur once in chains of any length are not put into the tables, since all possibilities are open with only one occurrence, while with at least two occurrences, we could get a mixed distribution, a first position, or a final position distribution pattern.

Table 3-4 Verbs with mainly final position use

<i>Verb</i>	<i>Meaning</i>	<i>Final</i>	<i>Non-final</i>	<i>Following verb</i>	<i>Simplex use</i>
jɪŋ/juʊŋ	return; redo	18	1	ni	*
ni	give	14	3	jɪŋ/juʊŋ	2
ba	finish	6			1
ndón/ndón	pass; surpass	6	1	jɪŋ/juʊŋ	3
kwaŋw	ascend	5			*
yaʌŋ	gather; be.together	5	1	yaʌŋ (reduplicated)	1
reŋw	arrange	4			1
yee	change.location	4			*
fuu	be.satisfied (of food)	3			2
yer	begin	3	1	jɪŋ/juʊŋ	6
baŋ	be.beautiful	2			E
ke	know	3			E
sii	stay; spend.the.day	2			*

As we see, the most frequently recurring verbs in the 2-verb chains are **jɪŋ/juʊŋ** ‘return; redo’ and **ni** ‘give’. These two verbs both have a strong tendency to occur in final position of chains. **jɪŋ/juʊŋ** ‘return; redo’ has no single use recorded in the corpus, and the only non-final occurrence is in front of **ni** ‘give’. For **ni** ‘give’ itself, and the other verbs in Table 3-4, they always occur with **jɪŋ/juʊŋ** ‘return; redo’ as following verb. It seems that for these verbs to occur in a non-final position in a chain, **jɪŋ/juʊŋ** ‘return; redo’ must be, or is highly likely to be, the following final verb. In the case of **jɪŋ/juʊŋ** ‘return; redo’, **ni** ‘give’, must be, or is highly likely to be, the following final verb. The exception is **yaʌŋ** ‘gather; be.together’, but this is a reduplication, and as such more like an intensifying device which could also occur in non-serialising languages.

The next two tables show verbs with a mixed distribution pattern, first their use in the first position of 2-verb chains, Table 3-5, and then in final position, Table 3-6. There are a few verbs which clearly demonstrate a mixed distribution, most strikingly **ge** ‘go’, and **dib/diw** ‘exit’, both motion verbs.

Table 3-5 Verbs with mixed distribution pattern, first position.

<i>Verb</i>	<i>Meaning</i>	<i>Non-final</i>	<i>Following verbs</i>	<i>Simplex use</i>
ge	go	6	juʊŋ (4), ni , síí	14
dib/diw	exit	4	ndon (3), reŋw	1
dii	put; leave	2	jɪŋ/juʊŋ , kwaŋw	3
se	see	1	ke	2
suŋ	drink	1	síí	E

(Meanings of following verbs: **jɪŋ/juʊŋ** ‘return; redo’, **ke** ‘know’, **kwaŋw** ‘ascend’, **ndon** ‘pass’, **ni** ‘give’, **reŋw** ‘arrange’ **síí** ‘spend.day’.)

Most, but not all, of the ‘following verbs’ in Table 3-5 are also found in Table 3-4, they are the verbs typically filling a final position in 2-verb chains.

Table 3-6 Verbs with mixed distribution pattern, last position.

<i>Verb</i>	<i>Meaning</i>	<i>Preceding verbs</i>	<i>Final</i>	<i>Simplex use</i>
ge	go	ḃḃḃ, cee, ka, dag, zi	5	14
dib	exit	nyín/nyíín, pan, túú, yáú	4	1
ḃi	put; leave	haan, kúú	2	3
se	see	di	1	2
sun	drink	vwaw	1	E

(Meanings of preceding verbs: **ḃḃḃ** ‘call; shout’, **cee** ‘descend’, **di** ‘come’, **dag** ‘fall’, **haan** ‘yawn’, **jaŋw** ‘fight’, **ka** ‘take’, **kúú** ‘die’, **nyín/nyíín** ‘stand’, **pan/peen** ‘carry’, **pín/píín** ‘do;make’, **se** ‘see’, **túú** ‘cough’, **vwaw** ‘snort’, **yáú** ‘rise;work’, **zi** be.numerous.)

Most, but not all, of the ‘preceding verbs’ of Table 3-6 are never used in a final position in the chains of the corpus.

Table 3-7 Verbs with first position use

<i>Verb</i>	<i>Meaning</i>	<i>Non-final</i>	<i>Final</i>	<i>Following verb</i>	<i>Simplex use</i>
ḃḃḃ	call; shout	5		yááŋ (2), ge, mgbee, yer	11
dag	fall	4	1	jin/juun, ndón/ndóón, ba, ge	1
taŋ	eat	4		ba, fuu (3)	2
cee	descend	3		ge, jin/juun (2)	E
kpán	tell	3		ni (2), ba	1
gan	say	3		ni	E
cim	jump	2		kwaŋw, yee	E
di	come	2		kwee, se	12
fum	cut.clear	3		ni	2
jaŋw	fight	2		ke	E
ké	jump; start	2		dag, saan	E
túg	spit; cough	2		ni, dib/diw	E
swee	laugh	2		reŋw, yááŋ	3
loo	run	1		yááŋ	E
yáú	rise; work	1		dib/diw	2
ka	take	1		ge	2
ḃur	cut.open	1		yer	E
pan/peen	carry	1		dib/diw	E
nyín/nyíín	stand	1		dib/diw	2
nyin	speak	1		yee	1
yéé	will want	1		ndón/ndóón	10

(Meanings of following verbs: **ɗag** ‘fall’, **dib/diw** ‘exit’, **fu** ‘be.satisfied’, **ge** ‘go’, **jɔɔɔ**, **jɪn/jɔɔɔ** ‘return; redo’, **ke** ‘know; exist’, **kwaɲw** ‘ascend’, **kwɛɛ** ‘find’ **mgbee** ‘arrive’, **ndon** ‘pass’, **ni** ‘give’, **reɲw** ‘arrange,’ **saɔɔ** ‘wake.up’, **yááɔ** ‘be.together; gather’, **se** ‘see’, **yer** ‘begin’, **yɛɛ** ‘change.location’.)

Again we find that the ‘following verb’ group contains the verb of Table 3-4, but with a few additions.

3.3.1 Comments on the distribution pattern tables:

The first position of a chain clearly has the potential of attracting a large number of verbs, whereas final position is mainly occupied by a smaller group of verbs. This is seen also in the fact that of the 42 verbs with single occurrence in 2-verb chains, only 5 are in the final position.

An interesting fact is that while there are verbs with a final distribution pattern, these usually have another verb of the same group following when they are used in non-final position. The same applies to verbs with a mixed pattern: when they are not in final position, the final position is most often filled by a verb from the ‘final position’ group.

But even though there is a group of verbs that typically occur in final position, and which account for a large number of the 2-verb chains, they do not constitute a closed set. Other verbs do occur in final position, as seen in Table 3-5 and Table 3-7. With a larger corpus one would probably find both the same tendency for certain verbs to fill the final position of chains, and an even larger array of other verbs also used in this position.

3.4 Serial verbs

Verb serialisation or serial verbs is found in many languages in different parts of the world, notably West Africa, South-East Asia, New Guinea, Oceania, Central America and in a number of pidgins and creole languages (Durie 1997:289, Lord 1993: 1-2). Though what might be considered as a typical serial verb construction consists of a sequence of two or more verbs acting together like a single verb, different languages present a number of variations on this theme. The properties regularly found with serial verb constructions, can be seen both as key characteristics of the unity of a verbal series and as consequences of this unity (Durie 1997: 291).

The phenomenon of verb serialization obviously has a syntactic side to it: a series of two or more verbs enter into grammatical relations with each other and with other constituents of the sentence, in particular ways. Different authors have worked on the issues of complex predicates within different frameworks. One question often addressed is how the serial verbs are related to each other, if they are coordinated ‘small sentences’, embedded predicates or heads of double- or triple-headed VP’s. Another concerns the argument structure of the verbs involved. To the extent that a

syntactic theory places the possible number of arguments as a feature of the verb in the lexicon, it is within some theoretical approaches difficult to reconcile the argument structure of one-, two-, and trivalent verbs occurring with shared arguments in a single clause, when relying on syntactic means only (Durie 1997:295-6, 298).

3.4.1 Nizaa chains - serial verbs or compounds?

The Nizaa verb chains as described above clearly have many characteristics in common with serial verb structures as found in many languages of West Africa. First and foremost they denote something that is conceptualized as a single event; from this fact follows that they can often be translated by a single monoverbal clause. The verbs of a chain also share tense, aspect, modality and polarity, and have a single morphological realization of these operators, attached to the last verb. They ‘share’ also at least one, and possibly more, arguments. One verb cannot be said to be embedded in the other, or be a complement of it. The chain furthermore takes only one subject/external argument.

But other traits of the chains differ from the usual set-up of serial verbs, most importantly the fact that nothing can intervene between the verbs. While many serializing languages have a structure where the object of the first verb is also the ‘subject’ of the second verb, Nizaa must have any objects after both verbs (or all verbs, in the case of 3 and 4-verb chains). They are thus clearly more close-knit than verb series in e.g. Twi. Another indication of this, is the tone changes sometimes occurring within a chain: a non-High verb like **ge** ‘go’ can get a Middle-High tone contour in front another non-High verb like **jɪŋ/juɪŋ** ‘return’. Though not a consistent pattern with all chains, it may be indicative of a compounding process.

Now a very common phenomenon in serializing languages is a strong tendency either to lexicalize the meaning of the complex, so that the whole serial complex become a lexicalised item, or to grammaticalise a verb within the complex to an adposition or case marker (Lord 1993). In a diachronic perspective it would thus not be surprising to find that Nizaa verb chains are in the midst of, or at the end of, a compounding process, or that certain verbs function somewhat like case markers.

On the other hand, there are reasons to look at these chains as something else than merely compounds functioning as single lexical items. As we have noted in the tables above, the verbs used in chains are to a large extent used also as ordinary single verbs. Those verbs that are subject to the strong-grade –weak grade alternation of the root, display this alternation also within the context of chains. Chaining is also a highly productive process; it is in Nizaa no question of a small class of lexicalised compounds (Givón 2001: 164, 166). As we saw in tables 3-1 to 3-3, there are a large number of verbs used only rarely in chains, showing that chains are essentially an open class.

Should we then categorize Nizaa chains as compounds, rather than verb series? This could facilitate the analysis, at least from the point of view that hold complex predicates formed in the lexical component as less problematic in a syntactic treatment, i.e. some versions of LFG, (Alsina

1997: 232). But we still would not get any nearer to the conceptualization issues that seem to be at the bottom of such structures.

We consequently see it as a profitable task to try and understand the mechanisms at work in these structures, be they compounds, or serial verbs, or something in between. Generally a purely syntactic treatment of verb serialization, or a purely morphological one for that matter, seems to be able to handle only parts at a time of this complex area, despite the often pronounced intention to account for more general phenomena. What is lost is a more comprehensive view of verbal serialization as an instantiation of the linguistic structuring of events, rooted in general human conceptualisation. To treat this issue, a semantic approach is needed. Within this overall framework of semantics, syntax will have its place in describing how the particular constructions of a language work.

In the next chapter we will present a theoretical framework for this task, based on Leonard Talmy's theory of event integration and lexicalisation patterns in different languages, based mainly on his 2000 book 'Towards a Cognitive Semantics' vol. II, chap. 1 and 3.

4 THEORETICAL FRAMEWORK OF THE THESIS

We have called for a more holistic view of complex predicates, a view that can take into account how events are conceptualised in a more general way. An elaborate attempt at just this is given in Leonard Talmy's two-volume book "Towards a Cognitive Semantics" (Talmy 2000: I-II). The following sections are a presentation of Talmy's theories as found in Talmy 2000¹⁵, and will serve as theoretical framework of the analysis in Part III of the thesis.

4.1 Event integration

Talmy 2000 undertakes to develop a typology of what he calls event integration. His point of departure is the systematic relations in language between meaning and surface expression¹⁶, at first glance not so different from the concluding statement of Alsina 1997 cited above. Talmy's approach is more far-reaching, though.

The two domains 'meaning' and 'surface expression' are seen as independent in the sense that elements can be isolated separately within each of them. Semantic elements are e.g. 'Motion', 'Path', 'Figure', 'Ground', 'Manner' and 'Cause'. Surface elements are verb, adposition, and subordinate clauses etc. A special kind of surface element is termed 'satellite', and plays a quite important role in the typological distinction Talmy makes between satellite-framed and verb-framed languages, which we shall look at later on (cfr. 4.2).

The relationship between these two domains is largely not one-to-one: a single semantic element can be expressed by a combination of surface elements, and a combination of semantic elements by a single surface element. Or the same type of surface elements can express different types of semantic elements, while different types of surface elements can express the same type of semantic element.

But this does not mean that the relations between the two are random; instead there are a wide range of universal principles and typological patterns to be found in the way semantic elements associate with surface expressions (Talmy 2000-II: 21).

In examining this relationship, one can both hold a semantic entity constant and examine its various surface expressions, or one can hold a (category of) surface entity constant and study which

¹⁵ It is mainly chapter 1 and 3 of vol. II which are presented here and directly used in the analysis, but occasional forays into other parts of the work occur, and the totality of his views as presented in the two volumes are relevant.

¹⁶ The word 'surface' is used simply of overt linguistic forms, not in the sense used within a derivational syntax framework

semantic entities are variously expressed in it. The subject of this thesis being the concatenation of verbs in Nizaa, it is the second option that we will try to work on in the analysis in Part III.

4.1.1 Macro-event, framing event and co-event

The idea of ‘event’ is central to Talmy’s theory, figuring as one of the basic categories of human cognition. The human mind is seen as capable of very general cognitive processes, which can be called conceptual partitioning and the ascription of entityhood. These processes extend a boundary around what would otherwise be a continuum, in space, time or other qualitative domain. The prototypical example of this ability to conceptually partition our environment, is the fact that we think of our physical milieu as consisting of objects, discrete entities which can be handled severally. This basic cognitive process is reflected in the fact that all languages have nouns, linguistic items labelling what we conceive of as objects.

‘Event’ is another type of such conceptual partitioning, which in a parallel way makes discrete entities out of the temporal continuum in relation to something qualifying that portion of time, in Talmy’s wording a *‘continuous correlation between at least some portion of its identifying qualitative domain and some portion of the so-conceived temporal continuum –that is, of the progression of time.’* (Talmy 2000-II: 215) Again we find a linguistic reflection of this general cognitive process in the fact that all languages have a group of linguistic items called verbs, labelling such entities with a relation to the continuum of time.

As conceptual entities, events can be cognised as being unitary, or as having an internal structure and some degree of complexity. A complex event is in turn partitioned into a main event and a subordinate event (Talmy 2000-II: 215). Such structural properties can be reflected by properties of the syntactic forms that can represent the event. An event complex can under a more analytic conception be represented by a multiclausal syntactic structure, or it can be alternatively conceptualised as unitary and represented by a single clause. In the last case the events have been conflated and event integration has come about. We shall present his example of the difference in conceptualisation in (1), which is a case of non-agentive causation of a state change:

(1) Non-agentive causation:

- a. The candle went out because something blew on it.
- b. The candle blew out.

The complex sentence in (1a) represents the main event (‘went out’), the subordinating relation (‘because’) and the subordinate event (‘something blew’). The same content is expressed in (1b), but as a unitary event.

Talmy coins the term macro-event for the unitary complex¹⁷. Within this complex the main event is also termed the framing event, and the subordinate event is termed co-event.

Now according to Talmy, the possibility of complex events to undergo conceptual integration as macro-events is quite constrained cross-linguistically. The main-event and the co-event must be of certain distinct classes and these events must bear certain relations to the whole complex and to each other (Talmy 2000-II: 217). They constitute the kind of more pervasive patterns of meaning-surface mappings that are Talmy's general concern in both volumes of 'Towards a Cognitive Semantics' and his specific concern in chapter 3 of vol. II.

In the following two subsections of 4.1.2 and 4.1.3 we shall examine the framing event and the co-event, before going on to Talmy's typological distinction of satellite-framed and verb-framed languages in section 4.2.

4.1.2 The Framing Event

As mentioned above, the main-event is also termed 'framing event' because it provides or determines certain overarching patterns in its relation to the macro-event: it performs a framing function (Talmy 2000-II: 219). It constitutes a particular **event schema**, one that can be applied to several different conceptual domains. Talmy 2000 cites five such domains¹⁸, based on cross-linguistic semantic and syntactic treatment (Talmy 2000-II2: 17-18). The five domains are Motion, Temporal contouring, State change, Action correlation and Realisation; these will be treated more closely later as part of the analysis of Nizaa chains in Part III. At this point, we shall present in more detail the concepts of framing event and co-event.

We shall look first at the relationship between the framing event and the macro-event, and then at the internal structure of the framing-event.

4.1.2.1 *Framing event in relation to the macro-event*

The framing event is said to provide a **reference frame** for the whole macro-event: the other activities included are conceived of as taking place within this frame. It thus determines the overall temporal framework and thereby also the aspect of the sentence that expresses the macro-event. Where a physical setting is involved, it determines the overall spatial framework, or some analogous reference frame if another conceptual domain is involved. Furthermore, it determines all or most of the argument structure and semantic character of the arguments within the macro-event, as well as all or most of the syntactic complement structure in the sentence that expresses the macro-event.

¹⁷ 'Unitary complex' sounds like a contradiction in words, but as Talmy uses it, it seems to mean a complex event expressed in a very close-knit way, i.e. conflation of two events in one clause as in ex. (1) b.

¹⁸ Without excluding the possibility of other domains.

It also constitutes the central import or main point (Talmy terms this ‘the upshot’) relative to the whole macro-event: the framing event is thus what is asserted in a positive declarative sentence, what is denied under negation, what is demanded in an imperative, and what is asked about in an interrogative (Talmy 2000-II: 219). We shall exemplify this with two examples with the framing event of motion.

- (2) “I kicked the keg into the storeroom.”
- (3) “The bone pulled loose from its socket.”

Both of these sentences contain an element of motion: the keg is moved into the storeroom, and the bone is dislodged from its socket. These motion events are the ‘upshot’, the main point of each sentence. But the motion element is not particularly tied to the verb: it is perfectly possible to kick or pull at something without moving it. In the verb we thus find another element, the co-event, which we will consider in 4.1.3. But before going on to that, something must be said about the structure of the framing event.

4.1.2.2 *Internal structure of the framing event*

The framing event has an internal structure, consisting of four components. We shall look at them first as they are used in the context of the framing event of Motion. Talmy sees Motion as the prototypical base for other conceptual domains: the four other conceptual domains cited above are said to be metaphorical extensions of Motion, rather than completely independent semantic structures.

In Talmy’s approach to events in general, and his approach to Motion events in particular, ‘Figure’ and ‘Ground’ are recurrent themes. The Figure is seen as the moving or moved entity with respect to a Ground. Since the Figure is the moving or moved entity, it may coincide with both the Patient and the Agent in different sentences. Where the Patient is a moved entity, with or without an overt subject/Agent, it will act as the Figure. Where there is no Patient, only an Agent moving, this agent will act as the Figure.

What activates the Figure-Ground relationship is Motion, and the Path followed by the Figure relative to the Ground associates them (Talmy 2000-II: 26).¹⁹ The following example may illustrate these concepts (taken from Talmy 2000-II: 49-50):

- (4) ‘The bottle floated into the cave.’

(4) is an event of Motion in space, and both the Figure and the Ground are physical objects. The Figure is the bottle, the Ground is the cave and possibly the presumed water flooding it, and the

¹⁹ This definition of Figure and motion makes the number of sentences with motion rather larger than the traditional use of ‘motion verbs’ as defining characteristic of motion.

framing event is Motion. (This framing event has a co-event of manner, but we leave co-events to be considered later on).

The Path followed by the bottle associates Figure and Ground, i.e. the Figure is moving INTO the Ground. What brings the relationship between Figure and Ground into being is the overarching, dynamic event of Motion: the bottle is perspectivised as *located* with respect to the cave. In the description of Motion as a process that activates a relationship between two entities, it is important to note that it is a parameter with two values. Both denote location of the Figure, but one value sees the Figure as moving while the other sees it as stationary, with respect to the Ground. MOVE and _{BE}LOC are the corresponding mnemonic labels used for these two values of Motion.

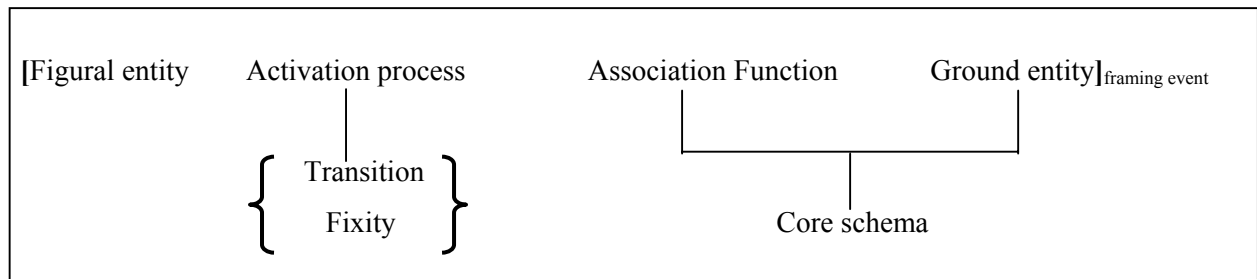
The same main components are somewhat schematised, but recognizable, within the other conceptual domains said to be framing events, Temporal Contouring, State change, Action correlation and Realization. The main components are thus in the larger contexts of all the framing events called *figural entity* and *ground entity* instead of Figure and Ground, *association function* instead of Path, and *activating process* instead of Motion (MOVE or _{BE}LOC). We shall consider these terms in the next paragraph.

When looking at the internal structure of framing events as a general phenomenon, the concrete terms from the domain of Motion are given a more abstract content. *The figural entity* is said to be the component on which attention or concern is currently most centred. *The ground entity* is conceptualised as a reference entity, with respect to which the condition of the figural entity is characterised. *The activating process* has two values: transition and fixity, paralleling MOVE and _{BE}LOC, and refers to whether the figural entity makes a transition or stays fixed with respect to the ground entity. *The association function* sets the figural entity into a particular relationship with the ground entity, in a way parallel to Path.

Now the four components are not of equal distinctiveness in the referential context: either the association function (Path) alone or the association function together with the ground entity (Path + Ground) can be considered the schematic core of the framing event (the **core schema**). This arises from the observation that the other two components are less clearly seen within the referential context. The figural entity is often set by context, and the activating process has only two values, transition or fixity. It is thus the association function and the ground entity that are most determinative of the particular character of the framing event and that distinguish it from other framing events.

The core schema has important bearings on the syntactical mapping of meaning to form (Talmy 2000-II: 218), this will be examined more closely in 4.2, on satellite-framed and verb-framed languages.

We include here Talmy's layout of the framing event:

Figure 4-1 Conceptual structure of the framing event

4.1.3 The Co-event

We noted above in 4.1.1 that a macro-event is complex, consisting of two events, exemplified with two different syntactic representations in (1). We shall look again at that example, this time from the point of view of the co-event.

(5) *Non-agentive causation co-event:*

- a) The candle went out because something blew on it.
- b) The candle blew out.

In both a) and b) the candle ceases to burn, and in both instances this is said to happen because of air blowing²⁰. Thus a cause for the event of extinguishing is given, in a) in the form of a subordinated causal clause, and in b) conflated in the main verb. The informational content of the two sentences is very much the same, but in b) we find it expressed as a unitary event or macro-event. The fact that the cause of extinguishing is expressed in the main verb of the sentence does not mean that it is the main event; rather the main event is the change of state occurring in the candle. The cause if this State change is then the co-event. Two parallel examples, only with manner instead of cause as co-event, is given in (6) and (7):

(6) The child hopped down the hallway.

(7) The ball bounced along the road.

In both (6) and (7) Motion is the main, or framing, event. Conflated into the main verb, the co-event is denoting the manner in which the Motion takes place, with hopping in (6) and bouncing in (7).

²⁰ Whether this came from a person deliberately blowing or was just an incidental draught of air is not important, though favours the latter interpretation.

These examples²¹ show that within the macro-event, the co-event constitutes an event of circumstance and performs functions of support.

The semantic character of the framing event is more like an abstract schema, while the character of the co-event tends to be more substantive or perceptually palpable, therefore the co-event may seem more vivid than the framing event. But even though it can seem semantically primary, it is still subordinate in the sense that the framing event frames, shapes, provides the upshot, and is determinative of the content of the co-event.

The co-event can range from being a minor support in the macro-event up to peer status with the framing event in its contribution to informational content. It is important to note that within the macro-event, the co-event is most prototypically an aspectually unbounded activity.

The general support relation is particularised as one out of a certain set of specific relations. Among these are Precursion, Enablement, Cause, Manner, Concomitance, Subsequence, Concurrent Result and Constitutiveness (capitalisation as in Talmy 2000-II: 220). The most frequent are Cause and Manner. Other support relations are possible. We shall give a list of condensed definitions of each type of co-event as presented in Talmy 2000-II: 42-47, with an English example for each co-event with a framing event of Motion.

Co-event support relations:

- i. *Precursion* –the co-event precedes the framing event, but does not cause or assist its occurrence.
“The researcher ground the caraway seeds into the test tube.”
- ii. *Enablement* –the co-event directly precedes the framing event and enables the occurrence of an event that causes the framing event, but does not itself cause the framing event (the co-event can also take the form of reverse enablement).
“Could you reach me that bottle down off the shelf?”
- iii. *Cause* –the co-event is bringing about the framing event, in either onset or extended causation.
“Our tent blew down into the gully from a gust of wind.”
- iv. *Manner* –the co-event co-occurs with the framing event as an additional activity of the figural entity, directly pertaining to the framing event, but distinct from it.
“I slid the mug along the counter.”

²¹ The examples being all from English, they are also in effect examples of framing satellites. This will be further treated later on.

- v. *Concomitance* –the co-event co-occurs with the framing event as an additional activity, but without directly pertaining to it, that is, it could just as readily take place by itself.
“I whistled past the graveyard.”
- vi. *Subsequence* –the co-event takes place directly after the framing event, and is enabled by, or is caused by, or is the purpose of that event.
“I stood/leaned/hung the painting on the chair/against the door/on the wall.”
- vii. *Concurrent result* –the co-event results from –is caused by –the main Motion event and would not otherwise occur. It takes place concurrently with, or during some portion of, the Motion event.
“The rocket splashed into the water.”
- viii. *Constitutiveness* –the co-event is a substrate being shaped by the framing event. (This co-event is most common with Temporal contouring, and Talmy do not give any examples with Motion, see Talmy 2000-II: 220, 232-36).
“He finished writing the letter.”

4.2 Framing events in a typological perspective

We have several times touched upon the typological distinction of satellite-framed and verb-framed languages. This distinction is built upon the observation that languages behave differently as to how the framing element of macro-events is expressed. Hitherto we have not drawn attention to this question in the treatment of the different examples above. But the examples are all drawn from English, and as we noted in footnote 21, they are (almost) all framed by satellites. What then is a satellite?

4.2.1 Satellites

Talmy 2000 uses the term ‘satellite’ to refer to the grammatical category of ‘any constituent other than a nominal or prepositional-phrase complement that is in a sister relation to the verb root.’ (Talmy 2000-II: 222). This makes for a rather heterogeneous group as far as parts of speech is concerned, encompassing both bound affixes and free words. A listing of language-specific grammatical forms classed as satellites gives an idea of the phenomenon in question: English verb particles, German separable and inseparable verb prefixes, Latin or Russian verb prefixes, Chinese verb complements, Lahu nonhead “versatile verbs”, Caddo incorporated nouns, and Atsugewi polysynthetic affixes around the verb root.

All of these seemingly different constituents have a commonality, both syntactic and semantic, which justifies the analysis of them as belonging to one grammatical category. For one thing, the satellite is the characteristic site for the expression of the core schema of the framing event across one

typological category of languages. The following list is given by Talmy to illustrate macro-events with the core schemas of the five framing event types expressed by satellites (Talmy 2000-II: 214):

(7) The satellite in **bold** expresses:

- a. *The path in an event of motion*
The ball rolled **in**.
- b. *The aspect in an event of temporal contouring*
They talked **on**.
- c. *The changed property in an event of state change*
The candle blew **out**.
- d. *The correlation in an event of action correlating*
She sang **along**.
- e. *The fulfillment in an event of realisation*
The police hunted the fugitive **down**.

4.2.2 Satellite-framed and verb- framed languages

Talmy introduces from the behaviour of verbs and satellites two main typological groups of languages: those that characteristically map the core schema into the verb, and those that characteristically map it onto the satellite, as exemplified in the sentences above (Talmy 2000-II: 221-224). The first group of languages is said to have a framing verb and to be verb-framed languages, the second group is said to have a framing satellite and be satellite-framed languages. The languages within each group may be quite different in other typological aspects, as the list of examples of the two groups shows. Verb-framed languages are such as Romance, Semitic, Japanese, Tamil, Polynesian, Bantu, some branches of Mayan, Nez Perce, and Caddo. Satellite-framed languages are e.g. Finno-Ugric, Chinese, Ojibwa, Warlpiri and most Indo-European languages minus Romance.

The core schema generally appears alone in the satellite (or associated constituent²²) in satellite-framed languages, but appears conflated together with the activating process in the verb of verb-framed languages. With the core schema of the framing event located either in the verb or in the satellite, the co-event can be seen to appear in different locations as well.

Satellite-framed languages regularly map the co-event into the main verb, which thus can be called a co-event verb. This is a typical pattern of English, as seen in the examples above.

²² Although the satellite alone largely expresses the core schema in satellite-framed languages, it is also often expressed by the combination of a satellite plus a preposition, or sometimes by a preposition alone. Such a 'preposition' can also have various forms, free adposition, adposition + nominal inflection, or a construction containing a locative noun. Talmy 2000-II: 222

Verb-framed languages, on the other hand, map the co-event either onto a satellite or into an adjunct, typically an adpositional phrase or a gerundive-type constituent. Such forms are accordingly called a co-event satellite, a co-event gerundive, and so on.

4.2.3 Illustration of the two types

To illustrate the two types, examples taken from English are contrasted with Spanish. The two languages are basically satellite-framed language and verb-framed respectively. In a nonagentive sentence with a motion-type framing event, the English sentence in (8) have the core schema, the Path, expressed in the satellite *out*, while the co-event of Manner is expressed in the main verb *float*. It is important to notice that *float* by itself contains only the concept of a buoyancy relation between an object and some medium; the very idea of motion is contained in the core schema satellite.

(8) *The bottle floated out.*

The Spanish counterpart on the other hand, has the core schema of motion expressed in the main verb *salir* ‘to exit’. Here the gerundive form *flotando* ‘floating’ expresses the co-event of Manner:

(9) *La botella salió flotando.*

‘The bottle exited floating.’

The same pattern applies to an agentive state-change type of framing event, in (10) and (11) :

(10) *I blew out the candle.*

(11) *Apagué la vela de un soplo soplándola.*

‘I extinguished the candle with a blow blowing-it.’

In English, the satellite *out* expresses the transition to the new state of being extinguished, while the main verb *blow* expresses the co-event with the relation of Cause to the framing event. In Spanish, the main verb expresses the change of state, while the co-event of Cause is expressed by an adjunct, either a prepositional phrase or a gerundive.

Now verb-framed languages exhibit a scale of syntactic integration of the co-event into the main clause. The least integrated end of this gradient, e.g. in Spanish, has sentence-final gerundives of co-events that can be syntactically interpreted as adverbial subordinate clauses. As such they do not function as satellites, which as we remember are supposed to be constituents in a sister relation to the verb (Talmy 2000-II: 222). Such sentences are complex sentences composed of two clauses and therefore do not represent a macro-event. An example of this is (12):

(12) *La botella salió de la cueva flotando.*

'The bottle exited from the cave, floating.'

But Spanish also have constructions in which a verb referring to the co-event is in direct construction with the main verb –that is, with the framing verb. With this syntactic pattern, the whole sentence can be interpreted as a single clause, and hence as representing a macro-event. An example of this is given in (13):

(13) *La botella salió flotando de la cueva.*

'The bottle exited floating from the cave.'

The gerundive of (13) is still considered to exhibit only a midway integration into the framing clause, though, since the gerundive grammatical form points to a separate-clause origin (Talmy 2000-II: 224).

Within the five conceptual domains that Talmy defines as giving rise to framing events, Motion is the most basic, the prototype. But all the proposed framing events are seen as basic semantic structures, and have an *a priori* status in the very idea of a typology based on verb-framing or satellite-framing languages.

Before leaving this section on satellite-framing and verb framing languages, we may include Talmy's figures of the syntactic mapping of the two types, in

Figure 4-2 and

Figure 4-23 (Talmy 2000-II: 223):

Figure 4-2 Syntactic mapping of macro-event in satellite-framed languages

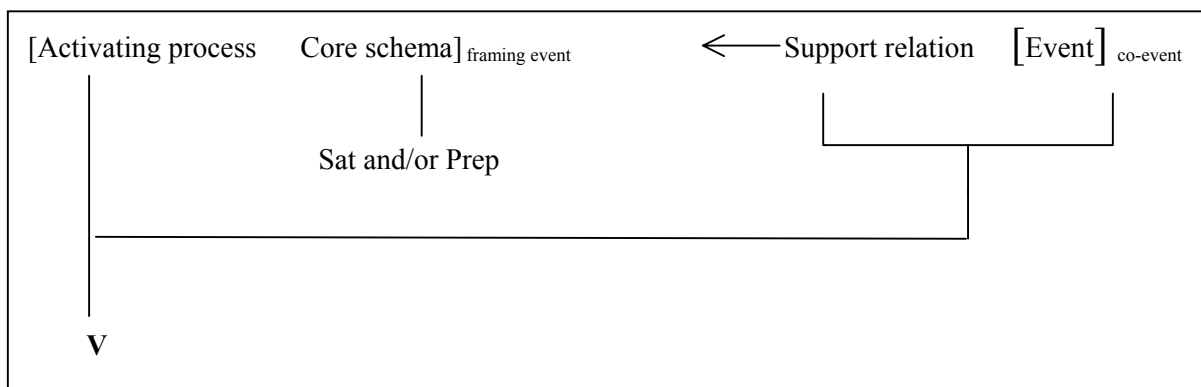
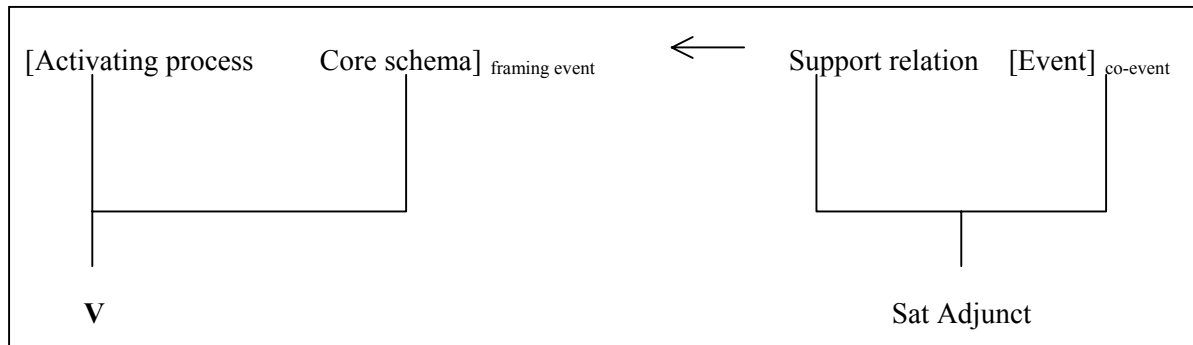


Figure 4-3 Syntactic mapping of macro-event in verb-framed languages

4.3 Lexicalisation and construction; syntactic considerations

Before we go on to look at the relevance of Talmy's semantic analysis to serial verb constructions, we will shortly comment on the ideas implicit in the wording 'lexicalisation pattern', e.g. as used in the title of chapter 1 in Talmy 2000-II. Furthermore we shall look at some syntactic sides to Talmy's account. We shall also consider more closely how general patterns can license under-specified and over-specified macro-events.

4.3.1 Lexicalisation patterns

Many cognitive linguists have hailed the idea of prototypical categories as very useful in the treatment of meaning, allowing homonymy to be minimalised and structured polysemy to reign. Such concepts as prototypical meanings, radial meaning structures and meaning chains have become useful tools to describe the connections existing within the meanings of polysemous words (Taylor 1995). This makes for 'heavy entries' on each word in the lexicon, in opposition to other approaches that assign each meaning its own lexical entry without relating them to other 'homonyms'. Talmy chooses a path somewhere in between these two extremes, when developping his notions of lexicalisation patterns.

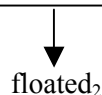
Talmy describes the difference between a verb used with simplex meaning, and the same verb used with additional meaning elements conflated into it as a difference of lexicalisation. In other words, they are two different lexical items with distinct usages, that is, with different particular selections of their semantic and syntactic properties (Talmy 2000-II: 24). Since such differences of usage often coincides with different surroundings of the verb in a clause, e.g. the addition of a satellite, he himself points to the possibility of seeing them from a constructional point of view (Talmy 2000-II: 35). This approach sees the original simplex meaning of the verb as retained also in semantically

more complex single-verb clauses, and the added complexities are treated as coming from the surrounding context, rather than from a different usage of the verb.²³

His own position is however to treat these patterns as lexical, in the sense that certain usages of a verb are said to add new lexical meaning elements which associate with new elements in the clause. One of the examples given is transitive and intransitive *break*, where the transitive usage is said to add an element of causation not present in the intransitive usage. This associates with a greater number of arguments in the sentence.

A verb like *float* may be used to show this. In its simplex or most basic meaning it refers to a buoyancy relation between an object and a medium, as in *The craft floated on a cushion of air*. This meaning can be used in a subordinate clause, next to a main clause referring to motion, as in *The craft moved into the hangar, floating on a cushion of air*. But in its second, more complex, usage the idea of motion is conflated with that of buoyancy. The verb can then appear in a one-clause sentence that is virtually equivalent to the two-clause sentence just cited, as *The craft floated into the hangar on a cushion of air*. We represent the two meanings together in (14), slightly formalised:

- (14) The craft MOVED [floating₁ [the while]] into the hangar on a cushion of air.



According to Talmy, the lexicalisation account is strengthened by the fact that there are often other verbs that correspond to one or the other of the different usages, but not to both. For the verb *float* this can be showed by using the verbal form *be afloat*. This form can be occur in the same semantic and syntactic contexts as *float₁*, (that is with a locative constituent), but not in those of *float₂*, (that is with both a directional and a locative constituent), as shown in (15):

- (15) Two different lexicalisations:

- a. The craft floated₁/was afloat on a cushion of air.
- b. The craft floated₂/*was afloat into the hangar on a cushion of air.

Different lexicalisations also make it possible to account for instances where a verb is used with ‘incompatible’ sentence constituents, because of an expanded sense. An example given is: *I stood at the front door carrying the box*, where *carry* normally cannot be used with a locative phrase, as opposed to *hold*, but is used with a locative sense in this context, where motion just has occurred or is about to occur.

²³ Construction grammar does this, as in e.g. Goldberg 1995.

What is important is in any case to identify the semantic components and their interrelationships (Talmy 2000-II: 34-35). According to Talmy, this can be done by treating the correspondences between semantics and syntactic expression as lexicalisation patterns where e.g. verbs have a number of usages in construction with a number of other constituents, which expand their meanings in various ways. The keyword seems to be ‘semantics first’, and when the semantic components and relationships are identified, we can study the patterns used to express them.

4.3.2 Syntax

With the above approach of starting at the semantics level, Talmy readily identifies a number of general patterns and more specific syntactic constructions, with the distinction between verb-framed and satellite-framed languages as a very basic pattern of semantic-syntactic relationships.

When arguing for the determinative role of the framing satellite in the sentence, Talmy shows how the framing element²⁴ has clear consequences for the syntactic realization of various semantic components and interrelationships (Talmy 2000-II: 278-286). The framing element is in fact determinative of most or all of the complement structure of the clause as well as the semantic character of the arguments represented in these complements. It also determines the overall aspect, and the ‘upshot’, as noted before in 4.1.2.

We shall cite a pair of examples, which shows how the addition of a framing satellite shifts the complement structure of a clause. In *I blew on the flame*, *blow* is inherently an intransitive activity verb that can occur in construction with an oblique constituent. But if the state-change satellite *out* is added, we get, in addition to the now familiar change to a complex macro-event (main event of extinction with co-event of blowing), a requirement of a direct object complement: *I blew the flame out*. The aspect has also changed from steady state to punctual.

Even more striking is the example of *I ran along the street* as compared to *I outran him*. Here the prefixal action-correlating satellite *out-* changes the unbounded steady-state activity of *run* to a bounded accomplishment requiring a direct object instead of an oblique object. The two objects have quite different semantic characters: one refers to a Path related to a Ground, while the other refers to an animate Patient that constitutes the coactive entity surpassed.

But the framing element is not determinative of everything in the sentence. The co-event element can also transfer particular features into the clause. Such transfers are said to be determined by the complex of constraints pertaining to the particular language, construction, satellite and verb, and their interactions. Also, features of complement structure arising outside the macro-event itself are typically not determined by the framing element. Such a feature can be an external agentive causal

²⁴ Talmy is here primarily treating the framing satellite, but the same can apply to a framing verb as well, Talmy 2000-II: 278

chain, which is typically responsible of getting an Agent represented as the subject of the clause and the Figure as direct object. (Talmy does not specify any further on this subject at this point, but see Talmy 2000-I: 271-279 for a treatment of causal chains.)

4.3.3 Patterns licensing generic verbs and pleonastic constructions

In a satellite-framed language, macro-events usually contain a specific co-event along with the more schematic framing event. It is the framing satellite that expresses the relevant semantic content of the sentence, accordingly it is not always necessary or desirable to express some specific ancillary event. But the general syntactic pattern is maintained by putting some generic or semantically neutral verb in the place of the co-event. English has such a bypass system with generically functioning verbs as *go*, *put*, *do*, and *make*. Thus one can say *The candle went out* instead of *The candle blew out*, or *went on* instead of *talked on*. Sometimes the co-event reappears as an adjunct in the same way as in verb-framed languages, as in *They went on talking/washing/working* or *I outdid him at cooking/playing chess/shouting* (Talmy 2000-II: 284-5).

Such ‘dummy’ verbs are one way of avoiding unnecessary specification of the co-event. Another possibility is the pleonastic use of a framing verb with a meaning close to that of the framing satellite. Thus the framing event gets referred to twice, and the verb cannot be used to express a co-event. This combination of verb and satellite can be treated as a phrasal form of framing verb. An English example is *search*: Used with the framing preposition *for* in *search for*, it becomes a phrasal framing verb equivalent to ‘seek’. To express the co-event in this case, a further adjunct would be needed, as in *I searched for nails on the board by feeling it*. Such ‘doubly framing’ verbs are termed pleonastic verbs (Talmy 2000-II: 286)²⁵. (An ‘ordinary’ co-event verb + framing satellite version of this sentence would be e.g. *I felt for nails on the board*.)

Another device present in satellite-framed languages is to generalize the use of an originally specific co-event verb. Such generalization is often tied to the prototypical co-event action undertaken to carry out the framing event expressed by the satellite, as when *look for* is used for any seeking in general, not just a visually conducted search. Again expression of co-event is relegated from the main verb to an adjunct, as in *I looked for nails on the board by feeling it*. Talmy terms this usage of a verb like *look* here as extended prototype verbs (Talmy 2000-II: 286).

4.4 Summary

In chapter 4 we have presented Talmy’s event semantics, especially the idea of clauses representing a complex event or macro-event, analysable into main event and co-event.

²⁵ A quite parallel observation of a single event doubly expressed is made in Rappaport Hovav&Levin 2001: 780, on such examples as *The pond froze solid*.

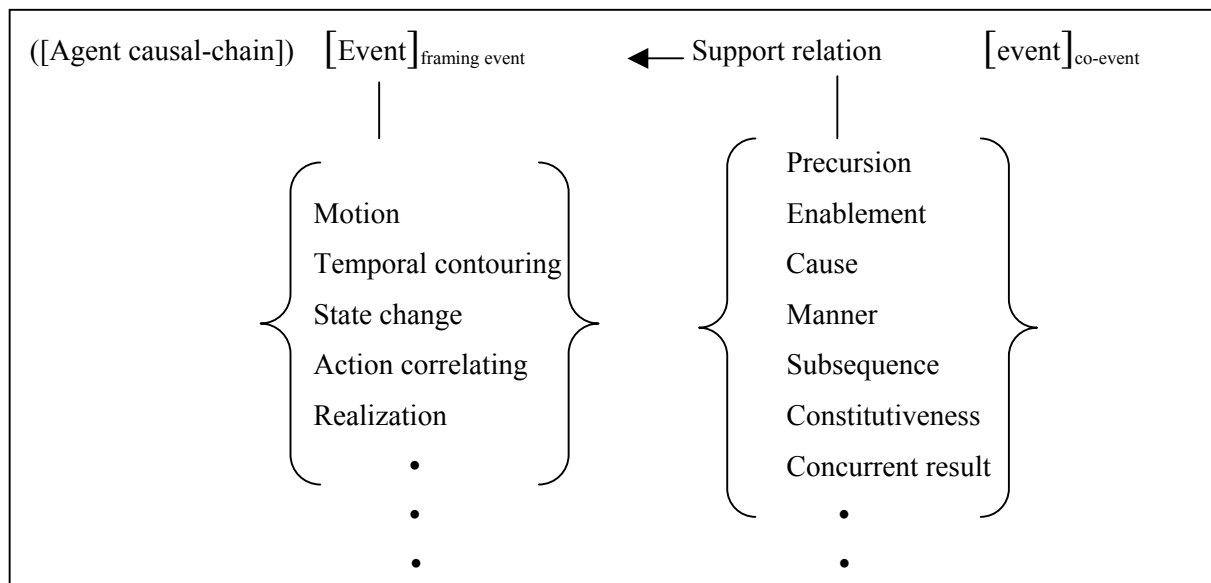
‘Main event’ is also called ‘framing event’, a term that points to the function of the main event within the complex event, or macro-event: it frames, shapes, provides the upshot, and generally structures the co-event. It is also determinative of temporal, spatial or aspectual framework, as well as argument structure and syntactic complement structure of the sentence (Talmy 2000-II: 219, 278).

While the types of main events are said to be a fairly restricted set across languages, co-events may vary enormously, though they also have a more restricted set of relations with the main event. The supporting co-event (often) has more semantic content, being more vivid and perceptually observable (Talmy 2000-II: 213).

There are five different conceptual domains that are seen as basic in the sense that events within these domains frame other events expressed in the same sentence. These five framing events are Motion, Temporal contouring, State change, Action correlation and Realization. Motion is seen as a source domain of which the other four are metaphorical extensions.

The following figure illustrates the conceptual structure of the macro-event (Talmy 2000-II: 221):

Figure 4-4 Conceptual structure of the macro-event



The framing event has an internal structure of four components; these are in the case of Motion, Figure, Ground, Motion and Path. For all five framing events taken together they are: *the figural entity*, *the ground entity*, *the activating process* and *the association function*. If we use the more abstract terminology, the most characteristic components of each framing event, the **core schema**, is *the association function*, or *the association function + the ground entity*. If we use the more concrete terminology associated with Motion, the core schema consists of the Path, or Path + Ground.

The parts of the macro-event are expressed not only in the verb, but also in the motley group of affixes and free words called satellites to the verb. Languages integrate main event and co-event into macro-events in basically two distinct ways: verb-framed or satellite-framed.

In the satellite-framed languages the framing event is expressed by the core schema in a satellite, while the co-event typically resides in the verb of the clause. In verb-framed languages the opposite applies: the framing event resides by the core schema (Path, or Path + Ground) in the main verb, while the co-event is expressed in a satellite or another adjunct, e.g. a verb in some infinite form. English and Spanish form in this respect a contrasting pair of languages, English being satellite-framed and Spanish being verb-framed.

Semantics are mapped onto syntactic patterns in a systematic way, giving as one result the above distinction of satellite-framed vs. verb-framed. But such established syntactical patterns within a language can be by-passed if need arises. A language may also have parallel ways of expression, as English which has a set of verbs borrowed from Romance languages. These verbs conflate Motion and Path instead of Manner.

5 APPLYING THE THEORY

The purpose of the present chapter is to bring the framework outlined in chapter 4 to bear more directly on the Nizaa data. There are also still some other theoretical issues that need discussion before we can embark on the analysis in earnest. This chapter will thus take us into a discussion of Talmy's approach applied more specifically to Nizaa, along with some other important theoretical issues, such as iconicity, before we begin the analysis proper in chapter 6.

5.1 Macro-events and verb chains

The subject of this thesis is Nizaa verb chains, which as we saw in 3.4 may be understood as some kind of serial verb construction. What can Talmy's approach to event integration say about languages where several verb roots form the verbal constituent of one clause?

Obviously the idea of macro-event can be seen to have a bearing on this kind of construction, since a serial verb complex is said to describe what is conceptualised as a single event, but contains different pieces of information lexicalised in different verbs (Durie 1997: 291). As obviously, the verb-framed type of languages seems to be the most likely candidate for the syntactic mapping of the complex event.

Let us look again at some typical Nizaa chains:

2) Sag	V1	V2	loc	Sag	V1	V2	Orecp
Năm	cɛɛ	jʉʉnasá	tuunâ,	fám dũù	ráá	ni	mbêw .
Năm-L	cɛɛ	jʉʉ-a-sá	tuu-nâ,	fám dũù	ráá-á	ni	mbêw-L
Hyena-DF	descend	return-into-down	hole-in,	uncle	hare	whisper-into	give monkey-DF

cm	V¹	V²	V³	loc
à	dú	kwaŋw	jʉʉ	cún
à	dú	kwaŋw	jʉʉ	cún
said	advance	ascend	return	tree
				head-on.

"The hyena descended down into the hole again, uncle Hare whispered to the monkey: Go climb up into the tree again!"
txt2:016

Ex 2) presents three chains, two with two verbs and one with three, (the chains are in bold type and marked V¹, V² etc.) All the chained-verb clauses translate readily into single-verb clauses in English, but they do in no way appear cumbersome or heavy in Nizaa. How is this possible? How do these structures work?

In the following chapters we shall try and answer that question by way of applying the theoretical framework presented in chapter 0 to the data of the corpus. We take as a point of departure that both the framing event and the co-event possibly will be present in different verbs.

An important question will then be how the events relate to each other in chains. Which verb shall be taken to express the framing event, and which will have a support function? Will the more expanded chains have something like two or more framing events, or two or more co-events? Could there be hierarchical structures within the chain, with one macro-event functioning as co-event to another higher-level framing-event? If it is possible to single out a framing verb in the chain, should the other verbs be seen as co-event satellites, more or less as in (13) above, or do they have a different relationship with the framing verb? How well are they integrated into the macro-event? Is there any system in what kind of verbs consistently appear in final position, and what kind of verbs stick to first position?

Such questions will lead the way in the analysis of Nizaa multi-verb structures in the next two chapters. But first we shall consider some perspectives of iconicity and economy that will be useful to our analysis of the Nizaa data in chapter 6. Then we shall establish some helpful terminology of semantic components, enabling us to generalize on and formalize the semantic content of Nizaa chains later on. The last section of 5.5 brings together the findings of chapter 3 with the general theoretical framework in the present chapter and in chapter 4, by proposing a number of hypotheses for the further treatment of Nizaa verb chains.

5.2 Iconicity and economy

Our first topic is iconicity, which offers an interesting perspective on some characteristic traits of Nizaa chains. We are here drawing substantially on Haiman's 1985 book "Natural syntax", putting it side by side with Talmy's approach.

5.2.1 Iconicity

Haiman 1985 treats iconicity of linguistic form on a broad basis. Of direct concern for our subject is the relation between conceptual and linguistic distance (Haiman 1985: 102-147). Haiman shows that linguistic items containing conceptually related information, tend to be located together in speech, and that little or no intervening material between linguistic units signals a higher degree of conceptual integration (Haiman 1985: 105-106). It is possible to range utterances on a scale ranging from monoverbal clauses via subordinated and co-ordinated clauses, up to fully independent sentences. As we saw in 4.1.1, Talmy proposes a very similar idea when speaking of a scale of event integration, where the most strongly integrated events are represented by a single clause, while less integrated events are represented by multiclausal syntactic structures (Talmy 2000-II: 215).

The relation between conceptual and linguistic distance bears directly on Nizaa chains, since they do not permit any intervening material between the verbs.²⁶ Semantically, one of the characteristic traits of these chains, and of verbal series in general, is that the events denoted by the verbs are seen as constituting a whole, a ‘single event’ as it were (Durie 1997: 291). The whole point of using a chain seems to be that the events are conveyed as conceptually integrated, a semantic ‘chunk’.

This chimes in with Talmy’s theory of the human mind as capable of ascribing entityhood to partitions of the otherwise continuous extension of time and space (cfr. 4.1.1). Events constitute one kind of such entities. They can be cognised as being unitary, or as having an internal structure, and these possibilities of different event structures will affect the syntactic structures used to represent them. Thus the ‘lumping together’ of verbs in a chain is an iconic expression of the ‘lumping together’ of the events referred to by the verbs.

Iconicity also plays a role in the ordering of the verbs involved in verbal series, something that has been noted by a number of authors. Lord 1993 says, “...the order of verbs in a serial construction typically is pragmatically iconic with respect to time.” (Lord 1993: 80). The same idea is expressed in Bodomo 1997 in the form of a Principle of Temporal Precedence, which predicts that in a complex event, the first verb will express an event temporally preceding the event of the second verb (Durie 1997: 291). This tendency is found in Nizaa chains as well, but the iconicity of the ordering of the verbs/events along a time line may be overridden by other concerns, that is, the sequencing of the events will be countereffected by the order of co-event and framing event.

5.2.2 Economy

The other concerns alluded to in the subsection above, are tied up to the general drive of economy in language. Iconicity facilitates understanding, but only up to a point: it must be counterbalanced by abstractions and generalisations so as to avoid too much detail in linguistic expression. Thus there is a typical development from analytic, transparent expressions (as e.g. in pidgin languages) via agglutination to more synthetic, opaque expressions in any ordinary language. Instead of ‘one meaning-one form’ (the isomorphism principle, Haiman 1985: 14), we get ‘several meanings-one form’ and ‘one meaning-several forms’.

Again a more explicit appeal to general cognitive capabilities of human beings can be made: we tend to categorise everything in the world, and the categories are based on prototypes rather than strict classification by properties. Events are categorised as belonging to different groups, e.g.

²⁶ There are notable exceptions, mainly with the verb **ni** ‘give’, which tend to occur after derivational suffixes, cfr. 7.2.3.

bounded and unbounded activities, and then the categories may be given some linguistic expression, e.g. different aspect markers. There is a correlation between reduced expression and a smaller set of ‘grammatical’ categories with more schematic or very extended meanings, as there is a correlation between fuller expression and the large set of ‘content words’ with more specific meanings.

The last point above bears on the proposed existence of a framing event within Nizaa chains. The framing event can be seen as a means of expression of more general categories in a more economic way, by having a somewhat restricted set of items modifying the sense of a much larger set of items. Co-events on the other hand, can be expected to cover much more detailed meanings.

Economy also plays a role in the occasional downplaying of the co-event. Sometimes the form of co-event – framing event is kept even though the specification of the co-event is unnecessary, as discussed in 4.3.3. This semantic simplifying of the verbal complex while keeping the syntactic pattern intact, can be seen in connexion with the next section, on backgrounding constituents with low cognitive processing costs.

5.3 Backgrounding in the verbal complex

We shall make a further remark along the lines of economy in language, following Talmy 2000-II: 128-131 on salience in the verbal complex.²⁷ In the linguistic packaging of information, the verbal complex (covering both main verb root and satellite in satellite-framed languages) is a constituent that typically does not attract direct attention to its reference, the information is, as it were, backgrounded. Both the speaker and the hearer thus readily process extra information included in the main verb root or in any closed-class element. In other words, information given in the verbal complex is present at a low cognitive cost.

The phenomenon can be seen when comparing the three following sentences: a. *I went to Hawaii last month.* b. *I flew to Hawaii last month* and c. *I went by plane to Hawaii last month.* The extra information of b. as compared to a. (i.e. the manner of the going to Hawaii) is readily included in b. while it is more foregrounded in c. where it is placed outside the verb complex.

Languages differ in the amount and types of information they can express in such a backgrounded way. In English both the Manner and the Path is characteristically expressed in backgrounding constituents (Manner in the verb root and Path in the satellite), and both components are thus expressed at low cognitive cost. In Spanish only Path is expressed in a backgrounding constituent (the main verb root), and Manner must be expressed in a gerundive or prepositional phrase, making more cumbersome sentences. Other verb-framed languages, with e.g. Manner

²⁷ A more complete discussion of the notions of foregrounding and backgrounding is found in Talmy 2000-I: 257-309 “The Windowing of Attention”.

characteristically expressed in closed-class satellites, (Nez Perce is cited as an example), should on the other hand be able to express this semantic component in a backgrounded way.

As we noted above, Nizaa typically conflates Motion and Path in the main verb in sentences of motion, and the semantic component of Path should consequently be backgrounded. Chains, on the other hand, are extensions of the verbal complex. One should thus expect that whatever semantic components should be present in the several roots would be backgrounded together, and that both hearer and speaker would readily process the whole complex. This process of backgrounding of several semantic components by grouping them together in the verb complex provides another perspective on the conceptual integration commonly said to occur in verbal series.

5.4 Event semantics²⁸ and Motion

To answer the questions posed in 5.1 in a principled way, we need an apparatus for semantic categories that go beyond the simple glosses we gave for each verb in chapter 2.

Because of the basic status of Motion, and also because the majority of verb chains in our corpus pertains to Motion, we shall treat the event of Motion more thoroughly.

5.4.1 Semantic ‘building-blocks’

Various semantic ‘building-blocks’ can be shown to exist across a great number of languages, in the form of *deep* and *mid-level* morphemes. A deep morpheme represents a concept that is supposed to be both fundamental and universal in the semantic organisation of language. A mid-level morpheme, on the other hand, represents a particular conceptual complex of a deep-morphemic concept together with certain additional semantic material. Such complexes belong to the semantic organisation of particular languages, though they can be typologically widespread. Neither is to be identified with the surface forms (in capital letters) chosen to represent them.

In the case of Motion, MOVE is used to represent the occurrence of autonomous translational motion²⁹, and BE_{LOC} is used for the non-occurrence of the same. Both are basic, deep level morphemes. If MOVE is agentive, it is represented by _AMOVE, which again is said to be best understood as a combination of MOVE and a causative matrix verbs “(to) AGENT”. Thus _AMOVE equals CAUSE to MOVE. Other causative matrix verbs are “(to) AIM” for verbs of attempting, and “(to) INDUCE” which represents in abstracted form the concept of ‘caused agency’.

²⁸ ‘Event semantics’ has in this case no immediate connection to the line of research instigated by Terence Parsons in his 1990 book *Events in the semantics of English: a study in subatomic semantics*.

²⁹ Translational motion means that an object actually changes location, as opposed to self-contained motion which has the figure moving on the same basic location, as e.g. in *spin*, *dilate* etc. Talmy 2000-II: 36-37

There is a number of mid-level morphemes that pertain to a change of location of the figural entity, and that we shall cite as they will be useful in the treatment of Nizaa verbs later on. The first is GO, which is a semantic complex referring solely to an Agent's volitionally self-propelled motion of its whole body, apart from any notion of deixis. Other mid-level morphemes adding something to MOVE or BE_{LOC} are COVER, (the Figure BE_{LOC} all-over the Ground), GIVE (Agent₁ _AMOVE the Figure into the GRASP of Agent₂), PUT (Agent controlledly _AMOVE the Figure by limb motion but without body translocation) (Talmy 2000-II: 37-39³⁰).

5.4.1.1 Motion and Path

The notion of Path is important with Motion. Path alone, or together with the Ground, is often the most salient expression of Motion within the clause, what Talmy calls the **core schema** (cfr 4.1.2.2). A sentence such as *Our tent blew into the gully* exemplifies this: without the Path notion expressed in *into*, the sentence would be both ungrammatical and have no mention of Motion.

Talmy sees of the Path component as having a tripartite internal structure: Vector, Conformation and Deictic (Talmy 2000-II: 53-55). The Vector component of the Path is the basic types of arrival, traversal and departure that a Figural schema can execute with respect to a Ground schema. Such basic Path notions can be shown as 'deep prepositions' relating a Figure to a Ground, using forms such as AT, TO, FROM, VIA, ALONG, TOWARD, AWAY-FROM, etc.

The Conformational component further specifies the Ground schema as having some form, like being an enclosure or a volume, with inside and outside and surface. In English, prepositions such as *into*, *out of*, *onto*, etc. expresses Motion to or from a point which is respectively of the inside of some enclosure, or on the top surface of some volume. Phrases such as '*roll into/out of the box*' or '*blow onto the table*' come readily to mind, so do French verbs such as *sortir* 'exit (from an enclosure)' or *entrer* 'enter (into an enclosure)'

The Deictic component typically specifies the Motion as being 'towards the speaker' or 'in a direction other than the speaker'.

5.4.2 Nizaa

Such deep or mid-level morphemes shall not be used as equivalents to specific Nizaa verbs, but they can be part of the semantic description of specific verbs and thereby clarify the semantic content of chains. A particular verb can be said to conflate a deep or mid-level morpheme with other semantic material.

³⁰ Talmy is in this passage in the middle of demonstrating how the co-event (e.g. manner, cause, precursion, etc.) can conflate onto deep or mid-level morphemes, and thus create complex events.

Moving on to considering Nizaa motion verbs, we find that Nizaa neatly fits Talmy 's description of having a "*whole series of verbs that express motion along various paths.*" (Talmy 2000-

II: 49).³¹ The verbs **ge** 'go, part' and **di** 'come' can be seen as GO, + a notion of Path pertaining to a

reference point (deixis)³². We can in addition mention the following sample, which all can be said to conflate MOVE or GO + Path (or Path +Ground: **dib/diw** 'exit', **cɛɛ** 'descend', **kwaŋw** 'ascend', **ndón/ndón** 'pass', **jib/jiw** 'circle; roam', **du** 'advance', **jin/juun** 'return; redo', **ngów** 'approach', **mgbɛɛ** 'arrive', **saw** 'cross', **tow** 'follow', etc.

An interesting property of these verbs are that they can be used both 'intransitively' and 'transitively', that is, they can describe the Motion+Path event with an underlying lexicalisation of [Agent GO+ Path], or with a lexicalisation of [Agent _AMOVE the Figure (= e.g. PUT, GIVE) +Path]. The fact that many motion verbs in Nizaa do not contain manner in their semantic build-up, may explain why they so easily accommodate both animate and inanimate arguments.

A smaller group conflates Motion and Manner, as **loo** 'run, move.fast', and **wɛɛ** 'crawl'. Verbs expressing locatedness are **gwa/gwɛɛ** 'sit; stay', **nuŋ/nuun** 'lie' and **nyín/nyíŋ** 'stand', they are BE_{LOC} conflated with Manner.

5.5 Hypotheses

Based on the findings of chapter 3 on one hand, and the theoretical framework outlined in chapter 4 and 5 on the other hand, I propose in this section some hypotheses for the further treatment of Nizaa chains.

The first and second hypotheses concern the most basic notions of chains in Nizaa, the very reason for looking at chains in terms of macro-events (cfr. 4.1.1. and 5.2.1). The second hypothesis also enters into the formal definition we have given for chains in Nizaa, cfr. 3.1.

Hypothesis 1 Chains express conceptually integrated events, events that are conceptually close in some way, and that can be considered macro-events.

Hypothesis 2 Any morphological material occurring between the verbs signal a looser conceptual integration of the events denoted (Haiman 1985: 140).

Within such macro-events, it should be possible to discern framing events and co-events. Since the framing event is the more schematic of the two, it will tend to be expressed by a smaller set of linguistic items. We saw in 3.2.1 that a small number of verbs are frequent members of chains, some of which nearly always in final position. The following hypotheses are proposed to account for this pattern:

Hypothesis 3 The framing event will be expressed in the final-position verb form.

Hypothesis 4 The verb appearing in the first position will bear a support relation of co-event to this framing event.

Still the group of verbs occurring in final position ('final position verbs') does not seem to be a closed set, describable by a list. There is both a group of verbs only occasionally used in final position, and another group of verbs with a mixed distribution pattern, occurring frequently in both first and final position of chains.

We propose Hypothesis 5 to account for the extended group of 'final position verbs', counting also the 'mixed distribution verbs' when used in final position of chains:

Hypothesis 5 Verbs used in framing event position must be semantically compatible with a framing event type.

When occurring as first position verb, 'mixed distribution verbs' will normally be followed by a 'final position verb'. There are two proposed explanations for this behaviour, and both are to some extent tied up with hypothesis 3 and 4. They are presented in Hypothesis 6:

Hypothesis 6 When used in first position, 'mixed distribution verbs' are followed

- a. either by a final position verb of the same framing event type, giving double expression of the framing event,
- b. or by a final position verb of another framing event type, giving an ordinary co-event/framing event expression of the macro-event.

A number of directional suffixes may occur with the last verb of the verbal constituent, be it a simplex or a chain. Hypothesis 7 is proposed to account for these suffixes, drawing on Talmy's analysis of the Path component as having a tripartite internal structure of Vector, Conformation and Deictic (Talmy 2000-II: 53, cfr 5.4.1.1 above).

Hypothesis 7 The Vector component is taken care of in the verb root, while derivational verbal suffixes of the final verb provide Conformational and Deictic components of the Path, that is, a more detailed specification of the Path in relation to a Ground schema.

Finally, I shall link the idea of the framing event as the 'upshot' with some ideas of discourse analysis. As we have seen in 4.1.2.1, Talmy defines the framing event as 'the upshot', that is, what constitutes the central import or main point of the sentence (Talmy 2000: 219). This makes it interesting to look at framing events from the point of view of narrative discourse structure, cfr. 1.3.2 We shall propose Hypothesis 8 to account for the relation between storyline and framing event:

Hypothesis 8 The framing event of a clause will be either directly on the main line of events, or be the event that connects the clause with the main storyline in sentences of supportive material and background information.³³

Hypothesis 8 can be used to check on the status of the final verb as framing event: if the final verb consistently does provide the connection to the storyline, it supports Hypothesis 3.

6 ANALYSIS OF THE 2-VERB CHAINS

We have now established a theoretical framework, looked at some facts of the language and proposed a number of hypotheses to account for the facts. Moving over now the actual analysis of Nizaa chains, we shall use the five types of framing event as departing points to examine the chained verbs, and define the placement of framing event and co-event within the chains.

Since the vast majority of chains contain only two verb roots and thus represent the most prototypical expression of verbal event integration in Nizaa, the bulk of the investigation will be carried out on these. Finally we will attempt to treat three-verb and four-verb chains the same way.

In accordance with Hypothesis 3 and 4, we will look at the two-verb chains to show that co-event and framing event are expressed in the first and final verb respectively. We will also show what relation exist between them in each case.

We shall present the material according to type of framing event, in sections 6.1- 6.5. Among the framing event types, Motion is treated first and most thoroughly, for two reasons:

- Motion serves in Talmy's model as a *prototype* for the other types of framing event (source for metaphorical extensions).
- Motion chains constitute the most frequent type of chains in the corpus

Within each subsection dealing with a framing event, we shall first give a short overview of the framing event as such, specifically noting its core schema. Then we will proceed to note the statistics of chains with the framing event in question, before exploring the different co-event support relations. In the treatment of the co-events, we are following the list in 4.1.3, which is roughly sequenced according to the temporal relationship of the co-event to the framing event. In each co-event group we will investigate closer one or several chains and examine the relation between the first and the last verb.

Among the co-events, Cause and Manner are treated more thoroughly, both because of their frequency, and because of their impact on the argument structure of the chains.

The formal versions of the sentences are made on a template consisting of [framing event] SUPPORT-RELATION [co-event].

6.1 Motion as framing event

Motion is an event of physical motion or stationariness. When the activating process is one of transition by the Figure with respect to the Ground, it is normally understood as translational motion,

(as opposed to self-contained motion (Talmy 2000-II: 25)). When the activation process is one of fixity of the Figure with respect to the Ground, it is understood as stationariness. As mentioned in 4.1.2.2, the association function of the Figure with the Ground is the Path, that is, the path followed or the site occupied by the Figure with respect to the Ground (Talmy 2000-II: 226-7). The core schema of Motion is Path, or Path+Ground. Motion is said to be the conceptual prototype of the different framing events.

It is rather complicated to give a schematization capturing all the possibilities within this macro-event type (cfr Talmy 2000-II: 227-228). Below are presented two versions, one agentive and one non-agentive. The first clause within square brackets represents the framing event and the second clause represents the co-event. They are related by the support relation which may have the several values we saw in 4.1.3.

3) *Motion schematization*

- a. [the Agent _A MOVED the Figure RELATIVE to the Ground] WITH-THE SUPPORT-RELATION-OF [the Agent ACTED]
- b. [the Figure MOVED RELATIVE to the Ground] WITH-THE-SUPPORT-REALTION OF [the figure DID.SOMETHING]

The largest single group of 2-verb chains in the corpus involves Motion, with either one or both verbs pertaining to motion. We shall in this section look at chains where Motion is expressed in the last verb, and leave chains with a first position motion verb to be treated with other framing events.

About 25 chains have two motion verbs as opposed to 18 with one motion verb; a complete list is given in Table B-1 of Appendix B. Nizaa has, as we have noted in 5.4.2, many motion verbs with Path conflation. The chains where both verbs pertain to Motion thus present a somewhat paradoxical situation, in often having two verbs containing a Path component. We shall show that the same structure of co-event – framing event may be present in these chains as in the other chains where only one motion verb is involved, but this does not cover all the cases. An explanation along the lines of pleonastic verbs, as described in 4.3.3, will be used to account for some of the remaining chains, while others can be seen to be in an intermediary position between Motion and Temporal Contouring.

6.1.1 **Precursion**

The obvious place to start would seem to be with the co-event support relation of Precursion, where the co-event precedes the Motion event, but without causing or assisting in its occurrence. Now it proved difficult to find any such chains in the corpus, at least with Motion as framing event (see 6.3.1 for a case of State change).

In accordance with Hypothesis 1 we propose that the reason for this is the conceptual integration which chains are indicative of. Within a chain, a strict separation of events in first and secondly occurring event is generally not important, if no other relation than temporal sequence is involved. We thus have no chain examples of Precursion as co-event support relation of Motion in the corpus.

Interestingly, we do have examples of verb sequences which are formally close to chains, but with insertion of the clitic - **rĕ** ‘verb detransitiviser’ between the verbs (cfr. 3.1). The events in these cases can be seen as being temporally more sequenced, having one event clearly distinguished as occurring before the other without directly causing or assisting in its coming about³⁴.

4)	S ^{ag}	Rel:[...]	V ¹	V ¹	O ^{pat}	adv ^{instr}
nìi	.....	lâw	yááwarĕ,	bugkĭ	kòm tíŋ lâw wù	ɔwáá mum, ...
nìi	....	lâw	yáá-wa-rĕ	bug-ki	kòm tíŋ lâw wú	ɔwaa mum ...
person....	DEM	rise-from-v.detr	grip-TOT	tree.sp. trunk	DEM	with hand one ...

“the ...man, rose up, gripped that kom-tree with one hand....”
txt5:029

In 4), the agentive subject first arises (or stands forth) in the first clause, and then proceeds to act on an object in the second clause. The first of the two verb forms labeled as V¹ can be analysed as a complex macro-event in its own right: it contains both the event of standing up in the verb root, and the event of forward movement from the Ground in the derivational suffix **-wa** ‘from’. These events are then ‘rounded off’ with the clitic - **rĕ** before going on to the events in the next clause.³⁵ The events of 4) are somewhat ‘spread out’ and thus less conceptually integrated than they would have been in a chain, but they are still close enough to be expressed in a multi-clause sentence.

6.1.2 Enablement

The support relation of Enablement to a framing event resembles Precursion in that it occurs before the framing event. But Enablement plays a more active role in its coming about. In the corpus we have several chains where the first verb can be seen to be temporally preceding the second verb, but with a support relation of Enablement rather than mere Precursion. Enablement events are not causing, but assisting or enabling the framing event to come about. 5) is a case in point:

5)	S ^{ag} -Aux	O ^{pat}	V ¹	V ²
Wàà	lúguùŋ	soŋw jér	gur	ɖiì.
wu-à	lúguùŋ	soŋw jér	gur	ɖiì
2s-aux	maize	bowl 10	buy	leave

“You shall **buy and store** 10 bowls of maize.”
txt6:004

The final verb of this chain, **ɖii** ‘put; leave’ is a verb of mixed distribution: in the corpus it occurs twice in first, and twice in final position. It also occurs twice in single verb clauses. In first position and the single-verb occurrences³⁶ the ‘put’-idea is stronger, while in final position it seems that the ‘leave’ idea is the most salient: the Figure is left and stays where it has been put.

Using the notation of 5.4, we can represent **ɖii** first as conflating a mid-level morpheme with other semantic material: [A_{PUT} Figure at/on location for it to STAY there]³⁷. A_{PUT} as a mid-level morpheme can be analysed as having conflated certain deep-level morphemes: [Agent CAUSE the Figure to MOVE TO a location]. It is thus a Motion event that is denoted by V², and we take it to be the framing event in accordance with Hypothesis 3.

This event is not caused by the event preceding it, the buying, **gur**, of the Figure, but it is enabled by it, by bringing the Figure within the grasp of the Agent. This chain is thus temporally sequenced: the buying must occur before the putting away can take place, but the two events are viewed as closely connected, by the fact that the two verbs are adjacent with no intervening material. V¹ thus expresses the co-event of enablement in relation to the framing event of Motion.

5) is taken from a procedural account. Procedures resemble narrative discourse in having a clear chain of main events (things to do to obtain a desired result). Within this particular account (‘How to raise chickens’), the storing of food for the future chicks is more relevant to the desired result than the exact way of procuring the food. This also points to the final verb as framing event, as proposed in Hypothesis 8 on the relation between framing event and the main line of events in the text. **Formal version:** [The Agent A_{PUT} the Figure on a location]WITH-THE-ENABLEMENT-OF [the Agent buys the Figure]

6.1.3 Cause and Manner

According to Talmy, Cause and Manner are by far the most frequently occurring co-events (Talmy 2000-II: 220). This is to some extent borne out by the material in the present corpus. These two co-events may be difficult to distinguish, but we shall follow Talmy’s definition of Cause as basically something the Agent does, and Manner as basically something the Figure does (Talmy 2000-II: 28). Thus in *The sailor kicked the boat away from the quay*, the Agent by his kick causes the Figure to MOVE away from the Ground, while in *The boat floated away from the quay*, the Figure MOVE away from the Ground with a manner of floating.

Cause and Manner have some intriguingly different syntactic consequences. Cause has the property of potentially augmenting the number of arguments of the framing event, in this case Motion, while this is less clear of Manner. Causation can be divided into a number of types, from unintended author causation, via intended agent causation and self-agentive causation, to induced causation, also called caused agency.³⁸ In all of these cases an Author or an Agent is effecting some Motion either of a Patient or of another Agency, or, to use the terminology that we have adopted in this thesis, an event

instigated by an Author/Agent causes a Motion event of the Figure, be it Patient or Agent of the Motion event. We thus often get a ‘different participants as subjects’-reading of the two verbs in a chain with Cause as co-event.

Manner, on the other hand, will typically have a ‘same participant’-reading of the two events. They will both pertain to the Figure’s motion, but the co-event will describe some activity or behaviour on the part of the Figure that does not change its location. A Manner activity of the Figure may thus be e.g. bouncing or spinning (self-contained motion), while the framing event of Motion expresses a change of location (translational motion).

6.1.3.1 Cause

When the co-event is bearing a Cause support-relation to the framing event, it is directly causing the Motion of the Figure, intentionally or unintended. We have an intentional chain in 6):

- 6) **V¹** **V²**
 ...**mbúú** **kwaŋwré**, ...
 ...**mbúú** **kwaŋw-re**....
 throw ascend-v.detr
 “....threw³⁹ it upwards,”
 txt5:029

To ‘throw’ an object is to put it into motion by moving it with one’s arm and then release it, and both verbs in this chain thus speak of Motion, with the first verb conflating Cause and Motion, and the last verb conflating Motion and Path.

To decompose this example semantically, we can use a formalism representing the proposed co-event as a subordinate clause connected with a main clause expressing the framing event: [Agent _AMOVE the Figure on an upward Path WITH-THE-CAUSE-OF throwing it] (Talmy 2000-II: 29). The chain thus has two ‘subjects’: the Agent doing the throwing and the Figure moving upwards.

This clarifies the central import of the sentence, namely that the Figure MOVE along a certain Path, expressed in V² **kwaŋw** ‘ascend’, thus containing the framing event. As additional information we are told that the cause of this Motion was the throwing done by the Agent, expressed in V¹ **mbúú** ‘throw’, thus containing the co-event.

The Figure is in this case typically patientive, an inanimate object that is handled by an Agent. We shall in the next subsection, on induced agency, go on to discuss at some length cases of a more agent-like Figure, in the light of some crosslinguistic considerations.

Induced agency in chains

An interesting chain of Cause and Motion is found in 7) below. It exemplifies a verbal combination frequently found in serialising languages, of a verb meaning ‘take’ with an intransitive motion verb.⁴⁰

Before proceeding to the actual Nizaa example, we shall have a closer look on this type of verbal series.

'Take'-verbs in a cross-linguistic perspective

In a number of languages, the combination of 'take' + intransitive motion-verb, has the effect of transitivity or causativising the clause. As independent verbs, the 'take' verbs in question typically speak of physical manipulation of a Patient; this restrains the possible objects of such verbs to 'take-ables' (Lord 1993: 94). Often when used in a serial verb construction, the 'take' verb has such an object, which then acts as the subject of the next verb of the series.

Another common trait of series with 'take' is the occurrence of an intransitive⁴¹ motion verb as the second verb of a series. Such a series often take the form of [NP₁ 'take' NP₂ 'move' (NP₃-loc)], where the first NP 'takes' the second NP, and the second NP then moves in relation to a location (Lord 1993: 86-87). The object of 'take' is thus also the 'subject' of the motion verb, and this shared NP is understood as caused to move by the subject of 'take'. Obviously, objects amenable to physical manipulation constitute the basic use of this construction, but as it becomes more grammaticalised, also other more abstract entities can be 'taken', or it is seen as sufficient for being take-able that something is moveable, so that e.g. persons are 'taken' and induced to 'move'.

In many cases, both the first NP functioning as subject and the second NP functioning as combined 'object/subject', may be understood to move, like 'he took and dragged X', 'he took X and came'. In other cases, just the participant introduced by 'take' is understood to move, like 'he took and hung X' (examples adapted from Lord 1993: 96-97; in our theoretical framework, 'X' corresponds to the Figure.) Both types display different referents as subject of the two verbs, though the first type is merely 'adding to' the NP₁ subject with NP₂, while the other type has an entirely different referent for NP₂ than NP₁.

Nizaa ka 'take'

6) above is a good illustration of the 'different subject' type. It denotes an Agent's action as causing the Figure to move, using 'throw', which like 'take' is a 'handling verb'. 7) below exemplifies the 'expanded-subject' type. The semantic character of the Figure is here different: it has more agentive properties than the Figure of 6), by being human as opposed to inanimate.

7) S ^{ag}		V ¹	V ²	O ^{pat}	adv
Nàw	kipôm	ka	ge	ɓuro	wân jèè, ...
nii-Pl	kí- pôm-L	ka	ge	ɓwi-ró	wân jèè ...
they	ana-villageDF	take	go	3pPl-ana	chief at

"The people of that village brought them (two brothers) to the chief's place, ..."
txt5:007

We thus have in 7) a case of induced agency: somebody is made to agentively carry out the action of moving to a location by the action of somebody else, although be it in all likelihood together with (representatives of) this other Agent. The formerly intransitive verb **ge** ‘go’ together with the transitive **ka** ‘take’, add up to a chain of Caused Motion.

What is strikingly different from the constructions of ‘take’ + motion-verb described above, is the fact that the ‘taken’ object, in this case two persons, is not allowed to intervene between the two verbs as a V¹ object/V² subject coalesced in one single NP. Instead the whole chain has become transitive, with a syntactic direct object in its normal position after the verbal complex. To put it differently, we have one macro-event, with a Motion framing event and a Cause co-event. The Motion event has an expanded subject: it is pragmatically likely that both the Agent and the Figure are carrying out the moving to a location.

Formal version: [The Agents INDUCED the Figure to MOVE with them to a location] WITH-THE-CAUSE-OF [the Agent took the Figure]

Other instances of Caused Motion

Another chain of induced agency is given in 8), and in this case the number of arguments actually present plays a role in the interpretation of the event structure of the sentence.

- 8) ...S^{ag} V¹ V² O^{recp} adv
 ...wân **ḡóg** **yáákí** níťānw ... ŋú díŋnâ.
 ...wân ḡóg yaŋ-ki nitamPL.... ŋwi díŋ-na
chief call assemble-TOT people3s yard-in

“... the chief called together the people, ... in his courtyard.”
 txt5:013

The Agent induces the multiplex Figure to assemble in his courtyard by calling them together, and so the Cause and the Motion event seem clear enough at first glance. The V² verb, **yáákí** ‘assemble; do.together; be.together’, may denote Motion of several entities to some location, and seemingly it is only this verb which specifies that Motion actually takes place in the sentence of 8). But the first verb **ḡóg** ‘call; cry.out’ also plays a role in the Motion reading of this example. While it does not by itself necessarily imply the motion event of several people coming to the same location, it introduces an indirect object of the chain. It thus has a similar effect as **ka** ‘take’, above. Without the presence of this indirect object with a Recipient role, the chain would possibly mean that a multi-subject ‘cried together’ (in this case a multiplex subject would have been required). We shall see an example of such a use of **yáákí** ‘assemble; do.together; be.together’ in 6.4. (Action correlation). **ḡóg** ‘call; cry.out’ thus lexicalizes different events in Nizaa, with different syntactic consequences: **a.** to call somebody (with Recipient object) and **b.** cry. out, (no object with Recipient role, though a complement clause of the utterance is possible).

Formal version: [the Agent INDUCED the multiplex Figure to MOVE to a location] WITH-THE-CAUSE-OF [he called them]

When passing over to the co-event of Manner, we find fewer complexities as far as the number of participants is concerned: Manner co-events do not introduce extra arguments.

9) **S^{aut}** **Aux** **V¹** **V²**
 ... kòm giv cún cèng á búú juəŋsəriwà.
kòm giv cún-L cèng á búú jɪŋ-sa-ri-wà
spec.tree big treeDF noise aux swish return-down-towards-subj.

The V¹ verb describes the sound that the Figure is making as it is descending from having being thrown up into the air. The V² verb **jɪŋ/juun** ‘return’ expresses the Motion +Path, together with the derivational suffixes that specify the Path of the Motion event. The first suffix **-sa-** denotes the Motion as going in a downward direction, while the second suffix **-ri-** denotes Motion towards the deictic centre of the sentence.⁴² (The last suffix **-wà** is part of the periphrastic progressive with the auxiliary **á** and the subjunctive form of the verb.)

Another example of Manner and Motion is found in 10), also with the derivational suffix -ri- in V²:

10) S^{ag}	V¹ V²
Nitànɰw	loo yaáɰriré
nitam-P1	loo yaɰ-ri-ré
people	run assemble-to-v.detr

“People came running to,.... “
 Txt1:012

The clause in 10) has a plural subject with the role of Agent, and Motion is expressed in the final verb **yaáɰ** ‘assemble’, which as we recall also can mean ‘do. together; be.together’. The complete form of the last verb is **yaáɰriré**, it contains as already mentioned the derivational suffix **-ri-** ‘towards’ denoting motion towards the deictic centre of the sentence. The last morpheme, **-ré**, is the verbal detransitiviser, it bars the mention of further arguments of the verb (in this case a possible locative phrase, which would be redundant in the context), and finishes off the clause as the last element. The final verb form thus expresses the Path in relation to the Ground, both in the verb root and in the suffixes.

Again one could discuss whether this is a case of Action correlation where a plural subject is seen as carrying out an activity (running) together, or a case of Motion with the Manner of the Motion described. The presence of **-ri-** disambiguates this, making it unequivocally a Motion event; it could not have been present in an Action correlation use of **yaáɰ** ‘assemble; do.together; be.together’.

The first verb **loo** ‘run’ conflates Manner and MOVE, denoting an unbounded activity. As co-event it bears the support relation of Manner to the framing event of Motion. In a discourse analysis perspective it adds colour to the description of the main event, which is the fact that these persons MOVED to a certain location.

Formal version: [the Figure _AMOVED to a location]WITH-THE-MANNER-OF [the Figure ran]

6.1.3.3 Cause or Manner?

We have already in 6.1.3.1 noted that Cause and Manner may be somewhat difficult to distinguish in some cases. This is partly a result of traditional grammatical terminology. In sentences such as *He kicked the keg into the storeroom*, *kick* would traditionally have been considered the manner of the Agent’s action to move something, but within our theoretical framework, this is considered the Cause of the Motion of the Figure. We shall look at some Nizaa examples where this confusion may arise or which may be read as both Cause and Manner.

The sentence in 11) has three clauses. All three clauses contain Motion, the first with a single verb, **ɖii** ‘put; leave’ (but note the derivational suffixes which define the path of the putting!). The second and the third clause contain 2-verb chains:

11) S ^{ag}	V ¹	O ^{pat}	adv	S ^{pat/S^{ag}}	V ¹	V ²	O ^{instr}
Mbêw	dīiasá	ḡú	kpáḡ	tùú	nùùḡnà, năḡ	záá	kwaḡwki kīniḡ,
mbéw-L	dīi-a-sa	ḡu	kpăḡ	tuú	nùùḡ-nă	năḡ-L	záá kwaḡw-ki kī-niḡ
monkeyDF	put-into-down	3s	tailDF	hole	mouth-in	hyenaDF	swing ascend-TOT it.in
S ^{ag}	V ¹	V ²	O ^{pat}				
mbêw	pan	dib-kí	năḡ.				
mbéw-L	pan	dib-ki	năḡ-L				
monkeyDF	carry	exit-TOT	hyenaDF				

" The monkey put his tail down into the mouth of the hole, the hyena dangled up with it, the monkey lifted the hyena out."
txt2:009

Let us start out by the third clause, which is a clear example of Cause and Motion. The Motion is expressed in the final verb, **dib/diw** 'exit'. The first verb is again a 'handling verb', denoting the Agent's action of carrying. This is what causes the Motion of the Figure, which is "human"⁴³ and thus agent-like. **pan/peḡ** 'carry' does not incorporate motion in its meaning, though it will often be used in situations of moving about with some load⁴⁴. Its basic meaning is rather 'to intentionally support an entity of some weight, with one's own body'. In assigning **pan/peḡ** 'carry' the support relation of Cause we follow Talmy's definition of assigning actions of the Agent to Cause, and actions of the Figure to Manner.

Formal version, third clause: [the Agent _AMOVED the Figure from a location] WITH-THE-CAUSE-OF [the Agent carried the Figure]

In the second clause, the Motion event is again expressed in the final verb, **kwaḡw** 'ascend'. The first verb **záá** 'swing' may denote the Cause or the Manner of the framing event of ascension. **záá** means 'swing back and forth' (like a swing on ropes). Now the subject of this chain coincides with the Figure as the moving entity in this clause, and so it is somewhat complicated to decide whether it is Cause (action of the Agent) or Manner (action of the Figure) that is present here. A Cause reading presents the subject as actively swinging himself up with the tail of the monkey, whereas a Manner reading sees the subject dangling upwards holding on to the tail lifted by the monkey. The two possible readings are hinted at in the analysis line, by having two alternative roles for the subject, Patient or Agent, which correspond to the Manner reading or the Cause reading respectively. We also propose two different formal versions to clarify the different readings.

Formal version, second clause :

- [the Figure _AMOVED to a location] WITH-THE-CAUSE-OF [the Figure _ASWUNG himself with an instrument]
- [the Figure MOVED to a location] WITH-THE-MANNER-OF [the Figure DANGLED in an instrument]

Finally we choose the Manner reading (the b.-reading) as the most appropriate; it is this reading that is most consistent with the following clause, which has the monkey lift the hyena out of the hole.

6.1.4 Concomitance

A different support relation occurs when two events take place together, and the connection is based only on this temporal relation. The next example has the subject carrying out two activities at the same time, with Motion as framing event. It is used in a periphrastic progressive construction with a subjunctive form together with the auxiliary particle *á*:

12) S ^{ag}	Aux	V ¹	V ^{2-sub}
Kùù ...	á	ḡḡḡ	gèwà.
kùú ...	á	ḡḡg	ge -wà
grandpa....	aux	cry.out	go-sub

"Grandpa ... is crying as he goes."
s38:005

Example 12) involves Motion as seen in the last verb *ge*, and has a co-event of concomitance in the first verb, the Agent is crying or shouting as he moves. Both events could well take place without the other, but they are put together in a chain, thus signalling the conceptual integration of the two activities involved and hence adding more colour to the description.

Again it is the framing event expressed in the last verb that brings the story onwards, the crying is supportive material serving to characterise the Agent.

Formal version: [the Figure _AMOVED] WITH-THE CONCOMITANCE-OF- [the Figure cried].

6.1.5 Concurrent result

A concurrent result is an event that is caused in some way by the framing event, but occurring simultaneously with it. It is not found with Motion in the corpus, though it occurs with other framing events.

6.1.6 Subsequence

When the co-event takes place directly after the framing event, and is enabled by, or is caused by, or is the purpose of that event, we have a support relation of Subsequence. According to Hypothesis 3 and Hypothesis 4, this should be expressed in the first verb of a chain, with a framing event in the final verb, as usual. Any simple iconicity of temporal or 'logical' sequence of events will thus be broken: the event occurring subsequently to the framing event is placed first in a chain.

In 13) below we find a sentence containing two instances of a colloquial and frequently used chain, with the 'mixed distribution' verb *dib/diw* 'exit' in V¹ position:

13) V¹ V² adv S^{ag} V¹ V² adv Loc
 Dib ndonrē, kǎ fààṅ mǎǎṅ dib ndonwú caṅw ṅu yeṅw, ...
 dib ndón-rē loc fààṅ mǎǎṅ dib ndón-wú caṅw ṅwi yéṅw ...
 exit pass-v-detr at back friend exit pass-pst again 3s thing

"He went out, behind him the friend also went out on his way..."
 txt4:023

The elliptical first clause contains only the chain **Dib ndonrē** 'exit pass' plus the verbal detransitiviser, but the lack of any Ground in 13), i.e. a specification of the location left, is only ostensive: the preceding context locates the subjects of the two clauses in a house. 13) then depicts the subject as leaving the house by passing through the door. This is expressed in an unobtrusive way, by means of conflating it into the motion-verbs of the verbal complex, thus back-grounding the information. No house is explicitly mentioned, no door is heard of, but the V¹ verb **dib** 'exit' conveys the idea of exiting from an enclosure, and the V² verb of passing through an opening.

ndón/ndóṅ 'pass' may mean 'pass (through)' a constriction, 'pass (by)' an entity, or with the derivational suffix **-a-** 'into', 'enter' an enclosure. (It may also be used with a stative meaning, 'surpass'). The same chain, with the same meaning, is found in the second clause as well.

Both verbs in this chain express Motion, V¹ specifying the Motion as ending up outside (Path + Ground) and V² specifying the Motion as a passage (Path + Ground). Both of the verbs may occur in simplexes, and both are recorded in the corpus as occurring both in V¹ and V² position, **dib/diw** 'exit' most typically so (cfr 3.3). The chain thus has a 'mixed distribution' verb in first and final position, giving us an opportunity to test Hypotheses Hypothesis 5 and Hypothesis 6.

The first predicts that verbs used in a final position must be semantically compatible with a framing event. This is borne out here, as **ndón/ndóṅ** 'pass' is clearly semantically compatible with a Motion framing event.

Hypothesis 6 predicts only two possibilities for chains with 'mixed distribution' verbs in first position. Either the V² verb is of the same framing event type, and we get a pleonastically expressed framing event, or the V² verb is of another framing event type, and we get an ordinary structure of co-event - framing event. The last alternative is exemplified e.g. in 34) below. Are the chains in 13) examples of the first alternative?

In my opinion it is still possible to discern a framing event and a co-event between these two verbs. The framing event is the passing of the door, and the 'being outside' is a subsequent co-event of this passing, enabled or caused by it. What makes this distinction possible is that the denotation of the two verbs are only partially co-extensive, and that passing through an opening may be seen as a prerequisite of getting outside an enclosure. In 6.1.8 below we shall examine other chains where the

verbs are more co-extensive in their denotation, and consequently expressing the framing event pleonastically.

Formal version: [the Figure _APASSED through an opening] WITH-THE-SUBSEQUENCE-OF [the Figure came outside].

6.1.7 Constitutiveness

When the support relation is one of Constitutiveness, the co-event is a substrate being shaped by the framing event (Talmy 2000-II: 220, 232). This type of support relation is most easily found in the corpus with Temporal Contouring as framing event. But another use seems to be as a substrate motion verb with a more specific motion verb as framing event, which can account for some of the chains with two verbs of Motion.

The first example is drawn from a sentence already cited in 3.1, to show the use of chains in general. Here we shall have a closer look at the second clause, which involves the mixed distribution verb **ge** ‘go’ in final position of the chain, as in 7) above. But while 7) has an Agentive subject and the active, transitive verb **ka** ‘take’ as co-event, 14) has a Patient subject and the inactive, intransitive verb ‘fall’ as co-event. What happens to the semantics of **ge** ‘go’ in this context?

As the most frequent verb of mixed distribution, **ge** ‘go’ is interesting in its own right. It occurs in two-verb chains as first and last verb 6 and 5 times respectively. It is also frequently used in simplexes⁴⁵, and in 3- and 4-verb chains. As for its first position use, we can see that it is typically followed by final position verbs, such as **jɪŋ/juɪŋ** ‘return’ (cfr. 3.3; see also the analysis of **ge juɪŋ** in 16) below). It also retains its concrete meaning of moving volitionally and self-propelled⁴⁶ to a location. The same applies for use in simplexes, though a certain tendency to auxiliarisation can be seen in its use with subjunctives, cfr note 45.

In final position the situation is somewhat different, though not necessarily so. We have already analysed two chains above with this verb in final position, and one more will be examined in the next subsection. The chain in 7) can profitably be treated here under the heading of Constitutiveness:

14)	S^{exp}	V¹	O^{pat}	Rel: [S^{pat}	V¹	V²]
	...6ulαəŋ	sewu	mbân	kùù	fǒð	ɗag gewunâ ,	...
	...6u-lâw-pl	se-wũ	mbânL	kùú	fǒó-L	ɗag ge-wũ-nâ	...
	....they-DEMpl	see-pst	placeDF	grandpa	staffDF	fall	go-pst-pcple

“....they saw the place that grandpa's staff fell off to,.....”
s42:004

The chain **ɗag gewunâ**, ‘fall go-to’, is the verbal constituent of an unmarked relative clause, with the final suffix **-nâ** co-referent with the head noun **mbân** ‘place-DF’. The subject of the relative clause is

kùù fṣṣ ‘grandpa’s staff’, a possessive syntagm. The possessive syntagm is directly following the head noun of the relative clause without any relative pronoun, as often is the case in Nizaa.

Hypothesis 5 predicts that any verb occurring in framing event position will also be semantically compatible with some framing event category, and **ge** ‘go’ certainly is compatible with Motion. But in this clause it can hardly be said to have a meaning of volitional, self-propelled movement. The Figure slips by accident out of a person’s hand, and then falls. But **ge** ‘go’ also contains the meaning of moving away from a location, to ‘part’. Thus, in this clause its presence tells us that there is a further Motion on the part of the Figure, it does not just fall straight down, but travels a certain distance before landing.

Within this macro event, the V¹ **dag** ‘fall’ can be seen as the event constituting the Motion. The Motion framing event shapes the falling as having a sideways trajectory in addition to the normal downwards direction of any fall, given the gravitational forces.

Formal version: [the Figure MOVED to a location] CONSTITUTED BY (it fell).

6.1.8 Chains with two motion-verbs

We noted earlier, in 6.1, the somewhat paradoxical co-occurrence of two Motion + Path verbs together in a number of chains. In this subsection we will propose a way of dealing with this, along the lines sketched in 4.3.3. What is at stake here is the fact that communicative needs in different ways may override the exigencies of a typical syntactic structure of the language. That is, the structure seemingly remains, but with a somewhat different semantic set-up. We shall repeat two of the main points concerning satellite-framing languages.

Co-event underspecification in satellite-framing languages

In a satellite-framing language, the co-event main verb and framing event satellite pattern may be kept in so far as the framing event still is expressed in the satellite. But instead of specifying a co-event proper, a generic verb may be used as main verb. Then the co-event may be reintroduced as an adjunct, forming a co-event satellite in its own right. In English ‘go’ is often used as a ‘dummy’ verb in this way, as in *They went on singing*. The ‘true’ framing satellite way of expressing this is *They sang on*, while an outright verb-framed way of expression would be *They continued singing*.

Another strategy that avoids specification of the co-event is the use of a verb with a meaning close to the framing satellite. The framing event thus gets referred to twice, both in the verb and in the satellite. If a co-event needs to be mentioned, it may again be introduced as an adjunct. An example may be the double expression of ‘seeking’ in the collocation ‘search for’, as in *They searched for bodies under the snow by probing*, compared to *They probed for bodies under the snow* or *They sought bodies under the snow by probing*. Again we can treat the resulting sentence as having a phrasal form of the framing verb, with or without a co-event satellite.

Both of these strategies are ‘by-pass operations’ which remould the sentence along the lines of a verb-framed language, and the verb is best treated as a framing verb of phrasal form.

Pleonastic expression in Nizaa

Since different communicative needs may be supposed to play just as great a role in Nizaa as in any other language, such mechanisms of bypassing the co-event should be possible to find here as well. Now the above concerns satellite-framed languages, while we are working from the assumption that a verbal series language like Nizaa are verb-framed, rather than satellite-framed. In verb-framed languages the locus of the framing event is the main verb and thus should be kept unchanged, or at least in its accustomed position, while the co-event specification will be downplayed by using a generic dummy verb/satellite or by having two verbs expressing the framing event.

This is what we will endeavour to show in the next subsection, taking up the idea of a double, pleonastic expression of the framing event, together with the effect of the verbal complex as a backgrounding constituent (5.3). By far the largest group of pleonastic chains has **jij/juuj** ‘return’ in V² position, though others groups exist as well. **jij/juuj** ‘return’ is therefore discussed in more depth in a separate subsection.

The first example of pleonastic expression of the framing event is presented in 15):

- 15) **V¹** **V²** **adv**
 ...**cεε** **gewu** **wúrâ**
 ...**cεε** **ge-wú** **wúr- nâ**
 ... descend go-past field.in
 “... goes down to the fields...”
 s33:001

The chain in 15) has **ge** ‘go’ as following verb, and is used of a person moving down to a location, her fields. The downward direction when going there follows from the typical localization of fields in the Nizaa area: they are often situated in low-lying plains by the riverside. This direction is placed at co-event position and does not play any further role. Instead emphasis is put on the fact of her leaving the location where she has been situated up to this point in the story, and going to the next ‘scene of action’. Thus **ge** ‘go’ is chosen as V² and framing event, while the Path specification present in **cεε** ‘descend’ is relegated to the V¹ position. We may also remark that **ge** ‘go’ in this chain is again used of volitional, self-propelled motion, thus differing from 14) above where it denoted only a parting, a ‘going away’, from the original location of a falling object.

The chain in 15) exemplifies pleonastic expression of the framing event of Motion. From the point of view of which verb has conflated which Path component, it is difficult to decide which verb should be the most ‘framing’, i.e. should contain the strongest core schema. There is no particular co-

event present, and as such the sentence could be said to express, not a macro-event or complex event at all, but one single event of Motion of the Figure in relation to a Ground. Still it uses the common way of expression with a 2-verb-chain, only bypassing the specification of a co-event.

From Motion in Space to “Motion” in Time

Another group of chains, containing **jɪŋ/juun** ‘return’ in V² position, poses a more complicated problem for the analysis. As seen from 3.2, **jɪŋ/juun** ‘return’ is one of the most frequent verbs in chains, and with one exception, always placed in final position. With a non-motion verb as co-event, **jɪŋ/juun** ‘return’ may function as any framing verb of Motion, as we saw in 9) with Manner as co-event. But what shall we make of chains where it is the second of two motion verbs?

A chain frequently heard, both in everyday usage, and in our corpus (four times), contains the final verb **jɪŋ/juun** ‘return’ together with the mixed distribution verb **ge** ‘part’, as in 16) below:

16) S ^{ag}	V ¹	V ²	adv	PP
Dùù	ge	juun	ŋu póm	waa jèè.
dùù	ge	jɪŋ	ŋwi póm	waa jèè
hare	go	return	3s village	wife at

"Hare returned to his village to his wife."
Txt1:006

In 16), with a general motion verb like **ge** ‘go, part’, **jɪŋ/juun** ‘return’ has the same effect as the word (satellite) ‘back’ or ‘back again’ in English: ‘Hare went back to his village.’ Of this particular chain with **ge juun** ‘go - return’, we can note that as a general rule it is very often used for ‘going home’, with or without separate mention of ‘home’, to such an extent that the above sentences which explicitly mentions ‘his village’, would be weird without this verb.

It is difficult to assign a clear co-event –framing event semantic structure to this chain: the two verbs are both denoting Motion, the first as parting from a present location, the second as coming back to a previous location. These two movements are necessarily co-extensive, as the parting from one location is also a movement towards the previous location.

Let us cite one more example, in 17).

17) S ^{ag}	V ¹	V ²	adv
Năm	cɛɛ	juunjasá	tuunâ, ...
Năm-L	cɛɛ	juun-a-sá	tuu-nâ, ...
Hyena-DF	descend	return-into-down	hole-in, ...

"The hyena descended down into the hole again,..."
txt2:016

This chain, involving **cee** ‘descend’ has again double mention of Motion + Path, with V^1 meaning downward movement, and V^2 movement to a location, as noted before. But in 17) **jij/juun** ‘return’ has no connotation of going ‘home’, it simply means going back to a location previously mentioned in the context. It thus specifies the Path of the motion in relation to the Ground: it is **jij/juun** ‘return’ that explicitly directs the Motion event to a specific location.

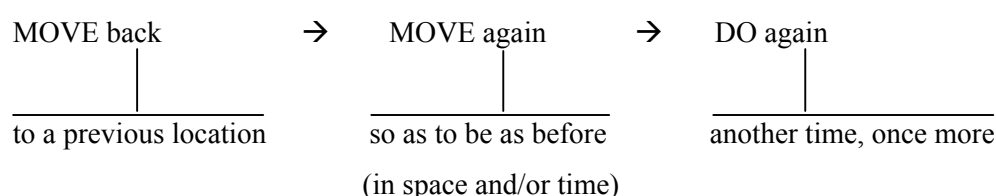
The Ground is also expressed in the derivational suffixes of **juun**: **-a-** takes the Motion into an enclosure and **-sá** denotes the Motion as vertically related to the ground. The suffixes thus take care of the Conformation component of the Path⁴⁷. The combined effect of the two suffixes with the locational phrase following them is Motion going vertically down into a hole in the ground.

Interestingly, the meaning of the last derivational suffix combines better with the meaning of **cee** ‘descend’ than with **juun**. The suffixes seem to bear on the whole chain rather than just the verb they are directly attached to, not surprisingly, perhaps, if we think of a chain as a complex of integrated events. The fact that derivational and inflectional suffixes are attached to the last verb of a chain, points to the framing function of the final verb within the larger whole, as we have seen in all the instances treated up to this point.

The best solution seems to treat these two, and other similar chains, as pleonastic expressions of the framing event.

The V^2 verb **jij/juun** ‘return’ has another characteristic meaning element that needs consideration. As the examples above show, **jij/juun** ‘return’ can be used of any returning to a previous location, and with various verbs of motion. But while it obviously has some Path-specifying function, in so far as it relates the moved or moving Figure to a Ground, it is also relating the action to the progression of time: it states that the Figure has been located with respect to the same Ground *before*. From this relation with time, there is an extension to the purely aspectual use of this verb, where the ground entity no longer is situated in space, but in time, as we shall show below in 6.2.4. We thus get a chain of related meanings of **jij/juun** ‘return’, linked by the relationship to the temporal progression, as tentatively shown by the change in satellites in 18) below.

18) *Meaning chain of **jij/juun** ‘return’:*



Seen in this way, verb chains in the left end of the scale will have a framing event of Motion, while the right end will belong with Temporal contouring. The chains in between will not be easily assignable

to either end: that is, a case can be made for both possibilities. The middle chains will typically have first position motion verb, so that the MOVE element is clearly expressed anyways, leaving the V² – verb of **jin/juun** ‘return’ with more of an aspectual meaning. In the middle there also will not be any overt locative argument in the sentence, since this has a disambiguating effect and pushes the chain towards the left end of the scale. The main effect of the middle chain is still a concern with Motion, since this is expressed in the V¹ verb as well. We shall cite two such examples before leaving this subject.

19) S ^{ag}		V ¹	V ²	O ^{pat}	V ^{1-sub}
Ndwèèŋ	laàŋ	ge	juun	yím	nwààŋ bààwà,
Ndwũŋ-pl	lâw-pl	ge	juun	yím	nwààŋ bàà-wà,
man-pl	dem-pl	go	return	medicine	fight seek-sub

S ^{ag}		V ¹	V ²	O ^{pat}	V ^{1-sub}
njeèŋ	laàŋ	ge	juun	yéŋwtân	pííŋwà.
njân-pl	lâw-pl	ge	juun	yéŋwtân	pííŋ-wà.
woman-pl	dem-pl	go	return	food	make-sub

“The men went back to seek fight-medicine, the women went back to make food.”
 Txt5:018

The two parallel clauses of 19) cite no overt locative element: **juun** ‘return’ most likely denotes ‘home’ in the case of the women going to cook, but may just as well denote some other location in the case of the men, depending on where (magical) remedies for fighting are kept. In any case the subjects leave their present location, and the English translation could just as well have been ‘went again’ or even ‘went away’ as ‘went back’.

The same line of thought applies to the next example. In 20) no location is specified overtly in this sentence, but as the speaker and his addressee are in the latter’s house, the choice of **dib/diw** ‘exit’ refers to a leaving of this location

20) S ^{ag}	V ¹	V ²
..yí	dífb	juunrá.
..yí	dib	jin-râ
..log.	exit	retun-pst.detr.

“...(goodbye,) I go back/ leave again.”
 txt4:016

The V² verb refers in a backgrounded way to the destination when leaving; the locative element is tacitly implied. We thus take this chain to be a pleonastically expressed Motion event, but exhibiting the characteristics of chains in the middle of the scale in 18): it could also be treated as ‘leaving again, anew’, in other contexts.

Formal version of 19) and 20): [the Agents _A MOVED to a previous location]

In 6.2.4 below we shall consider some chains with **jɪŋ/juun** 'return' where the glide towards an aspectual use has been completed.

6.1.9 Summary of Motion as framing event

In sections 6.1.1-6.1.8 we have been treating Motion as framing event in 2-verb-chains with a number of different co-events. A total of 43 chains were found to have this framing event, of these 18 were directly treated in 6.1.

We have seen that several of the hypotheses of **5.5** are supported, with **Hypothesis 3** as the pivot: framing events are expressed in the final verb of a chain. We have also shown that there is a consistent use of the final verb of the chain as 'storyline connection', as proposed in **Hypothesis 8**, adding further weight to the idea of the final verb as expressing the framing event. On the other hand, **Hypothesis 6** on the patterning of the 'mixed distribution' verbs in V¹ position, was shown to be too strong (cfr 6.1.6).

The co-events of Cause and Manner were treated somewhat more thoroughly than the other co-events, in 6.1.3. We noted general properties of causativity as compared to non-causative uses: it is reflected in the number of arguments of verbs (Lord 1993, p. 96). We found in several instances that the addition of a co-event verb with Cause as support relation had the effect of transitivity and allowing the presence of a direct object. In the treatment of induced agency, some crosslinguistic considerations were made, showing that Nizaa has a closer-knit structure than is the case for a number of other serial verb-languages.

Finally 6.1.8 showed that the structure of co-event – framing event may be by-passed with a double expression of the framing event, paralleling a phenomenon described for satellite-framed languages in 4.3.3. This bypass-strategy explains a number of the many chains with two Motion + Path verbs in the corpus. It is especially prevalent with the verb **jɪŋ/juun** 'return' as V² verb. This verb also exhibits a glide in meaning from Motion to Temporal contouring as framing event.

Table B-1 in the appendix B shows all the chains found to have a Motion framing event in the corpus.

6.2 Temporal contouring as framing event

We saw in 4.1.2.2 that Motion is only one out of five proposed conceptual domains structuring events. The four other domains are seen as metaphorical extensions of Motion, rather than completely independent semantic structures. The same main components are thus recognizable within these other domains, but somewhat schematised. This is expressed in the use of *figural* and *ground entities*

instead of Figure and Ground, *association function* instead of Path, and *activating process* instead of Motion (MOVE or _{BE}LOC). Thus Temporal Contouring plays the same role as Motion within the structure of the framing event, and has *transition* or *fixity* as its two possible values.

Temporal contouring is defined as the linguistic category of *aspect*, where aspect is conceptualized as an event in its own right. The general structure of a framing event can apply to a temporal contouring in two different ways (Talmy 2000-II: 230-31).

In the first way, the figural entity is the degree of manifestation of an event. Such degrees as full/partial/negative manifestation of an event are set into a fixed association with particular points or periods in time, these points or periods thereby functioning as the ground entity. Examples of the degree-of-manifestation type of temporal contouring are ‘starting’, ‘stopping’, ‘continuing’, ‘remaining unmanifested’, ‘iterating’, ‘intensifying’, and ‘tapering off’. These types of contouring thus act as figural entities with respect to the ground entity of time as given in the discourse universe.

The second way the structure of the framing event can apply to temporal contouring is in a process that affects progressively more of some particular finite entity. The figural entity in this case is the affected object; the ground entity is the temporal contour itself. The activation process is the object’s progression through time, this is analogous with Motion by the general cognitive analogy which conceptualise time in the same way as space (paraphrased as “MOVE”; the double quotes mark the metaphorical use of concepts from the domain of Motion.). The association function indicates the direction (e.g. TO or FROM) of the relationship that the affected object (the “Figure”) has with the temporal contour (the “Ground”). The core schema is by this analogy “Path (+Ground)”, with aspect often expressed by the same kind of constituents as Path (+Ground) in motion events, by metaphorical extension (Talmy 2000-II: 231, cfr.also p. 236-7). A common example of this type of Temporal contouring is ‘finishing’.

These two viewpoints of the temporal contour allow a more unified treatment of the semantic-syntactic interface on the point of transitivity, since intransitive events often instantiate degrees of manifestation, while transitive events can be seen as processes affecting objects.

Temporal contouring frames the macro-event in determining the overall temporal framework of the macro-event. A main function is thus linguistic aspect. With respect to the co-event, it acts as a shaping structure imposed on a substrate. When the substrate co-event is one of a steady-state continuation, the framing event can impose a cessation or completion of that activity (e.g. as in *stop singing*, *finish reading*). Or an activity’s basic tendency towards termination can be overcome to yield a continuation of that activity (e.g. as in *slowly dying*). Or again, a basic tendency to occur once and then cease can be overcome to yield iterations (e.g. as in *keep flashing*) (Talmy 2000-II: 232).⁴⁸

In the schematic set-up below, we have tried to capture the two different structures of Temporal contouring as framing event.

21) *Temporal contouring schemas*

- a. [the figural entity “MOVED” TO MANIFESTATION AT a TIME POINT/PERIOD]
 CONSTITUTED-BY [an activity/event]
- b. [the Agent “_AMOVED” the figural entity TO COMPLETION] CONSTITUTED-BY
 [the Agent ACTED on the figural entity]

Though more sparsely represented in the corpus, Temporal contouring is definitely present, but the number of different co-events is greatly reduced as compared to Motion, it is rather Constitutiveness that seems to be the one prevailing co-event.

Temporal contouring appears in the corpus both as **degree of manifestation** of an event, and as **process**. In the first case, the degree is acting as figural entity in relation to a point in time, which then can be seen as “Ground”. We shall treat examples of this in 6.2.1 and 6.2.2. In the second case, an object progressively affected by a process is acting as figural entity. The temporal contour itself acts as ground entity, with a “Path” relating the two, e.g. TO COMPLETION. Examples of this are treated in 6.2.1 and in 6.2.3.

The characteristic ‘shaping’ behaviour of Temporal Contouring as framing event, chimes in well with the fact that the most common co-event support relation by far is Constitutiveness, but it makes it somewhat useless to organize the analysis according to the different co-events. Instead we shall use as organizing principle the four verbs predominantly used for Temporal Contouring framing events in the corpus: **yer** ‘begin’, **síf** ‘spend.day’, **ba** ‘finish’, and **jín/juun** ‘return’. The following subsections will treat them one by one.⁴⁹ As before a formalized version will be given at the end of treatment of each example.

6.2.1 ‘To begin doing’

Our first example is an intransitive chain, with degree of manifestation as figural entity.

22) S^{em} V¹ V²
 Níná 666 yerakírā.
 níná 6óg yera-ki-rā
 baby cry.out begin-TOT-PFdetr.

“The baby started to cry.”
 s14g:03b

It is the starting point of the action of crying which is at issue in this sentence. The V² verb is thus lexicalizing the degree of manifestation, by pointing to a partial manifestation of the crying-event. This Temporal contour is related to the general backdrop of the past-time reference of the story, which then acts as ground entity to the event of starting, i.e. the time when the baby did not cry. The co-

event is 666 ‘cry’, it has a support relation of Constitutiveness to **yera** ‘begin’, as it is a substrate shaped by the framing event.

Formal version: [the Agent STARTED an activity] CONSTITUTED-BY [the Agent CRIED]

Our next example resembles very much 22), except that it is a transitive sentence. Rather than pointing to a degree of manifestation of an event, the chain of 23) denotes the starting point of a process which progressively affects the patient.

23) S ^{ag}	V ¹	V ²	O ^{pat}
Sāŋ	soo	yerakírí	nyààŋ.
Sāŋ	soo	yera-ki-rí	nyààŋ
prs.n.	broil	begin-TOT-PFtr	animal

“Sang started broiling the meat.”

s14g:01b

The transitivity must be seen as arising from the V¹, **soo** ‘to broil’, which is an action requiring a Patient, something that is undergoing broiling. The V² verb is also marked formally with the transitive perfective suffix **-rí** instead of its intransitive-marking counterpart **-rā** which we saw in 22) above.

The presence of the derivational suffix **-ki** ‘Totality of object’ in both 23) and 24) is interesting. Though it often implies a finishing of an event, it is not simply a marker of completive aspect. This is shown by the fact that it can appear with chains such as in 22) and 23) above, where the starting point of an event is at issue, not its completion. Rather, **-ki** refers to the affected object of some event as completely affected by that action; its most typical occurrence is thus in transitive sentences. But the preceding example is not transitive, and has an Agentive subject, and so the use of **-ki** in these sentences cannot be as marker of complete affectedness of a Patient, and thereby transitivity.

Possibly its use in these two different cases is tied to the figural entity more than participants such as Agent and Patient. As we remember it is the degree of manifestation which has the role of figural entity in such instances as ‘starting’. The use of **-ki** ‘completive’ points to a ‘complete’ start of the macro-event. We can thus give a more sophisticated version of the sentence as compared to the preceding example.

Formal version: [the Agent “_AMOVED” the figural entity to partial MANIFESTATION (it started)] CONSTITUTED-BY [the Agent broiled something]

Both 22) and the following 23) clearly shows the prevalence of the order of co-event-framing event, as compared to a temporal ordering of the events in chains, cfr 5.2.1. But a parallel expression

exists, also with **yer** ‘begin’, with the same meaning as 23), and this structure shows a more iconic order of events. It employs the modal construction with subjunctive verb rather than a chain, and it is without the derivational suffix of **-ki** ‘Totality of object’, as shown in 24) below:

24) S^{ag}	V¹	O^{pat}	Sub.V
S̩̃n̩	yerarí	nyààn̩	sòdòwà
S̩̃n̩	year-rí	nyààn̩	sòdò-wà
prs.n.	begin-PFtr	animal	broil-sub

“Sang started to broil the meat.”
s14g:01a

In the subordinate verb-construction of 24), the sequencing of the events is ‘start meat-broiling’. As shown in the two free translations, the two sentences are to a great extent synonymous, but with a slightly more integrated event-structure in 23). The information is packaged in a different way, with less backgrounding of the ‘broiling event’ since it has been taken out of the main verb complex and set apart as a subordinate clause, cfr. 5.3.

6.2.2 ‘To stay doing’

In the next two chains, the V² verb, **síí** ‘spend.day’, expresses the notion of ‘spend the day’ (French: se séjourner). It is for instance an integral part of greeting formulas: Did you spend the day well? It has a nocturnal counterpart **laa** ‘spend the night’ (French: veiller).

The V² verb **síí** ‘spend.day’ in the following example focuses on the repetition or prolonged carrying out of some action. Again, the Temporal contour has the role of figural entity denoting the degree of manifestation of the event in question:

25)	S^{ag}	V¹	V²	Foc	O^{recp}	V¹-sub
	...yí	ge	síí	kù	wu	maan̩ nyìl̩̃n̩ wà....
	...yí	ge	síí-cí	kù	wu	maan̩ nyìl̩̃n̩ wà
		...1sg	go	spend-hab	foc	2sg mother speak-sub
	“..it is I that constantly go to greet your mother..”					
	txt1:008					

In the example above it is not so much the fact of going to greet somebody in daytime that is at stake, but rather the constantly recurring aspect of this action. As time passes, it is manifested again and again, to the extent that it seems to happen all day. ‘ITERATE’ is used as a paraphrase below, since it captures the repetition of several full-cycle events, but this falls somewhat short of the idea of ‘constantly,’ or ‘always’ hinted at in the heading of this subsection, ‘To STAY doing’.

The V¹ verb is the content of this recurrence, the event that constantly occurs, in this example **ge** ‘go’. But this verb is used as ‘modal’ or ‘auxiliary’ verb with the modal construction and a subjunctive verb: it has its subordinated purpose clause ‘to speak’. Thus **ge** ‘go’ is modified as

modal, having a co-event support relation of Constitutiveness to **síí** ‘spend.day’, and the combined modal chain then governs the subordinate clause. The subordinate clause is integrated in parentheses within the square brackets of the co-event element below.

In the formal version below we have not made full use of the idea of the degree of manifestation as the figural entity, since this creates very complicated structures. Rather we use an aspectual notion in the framing event element, thus postulating it as a mid-level morpheme of Nizaa (cfr. 5.4.1). The same procedure is used in the following examples.

Formal version: [the Agent ITERATED an activity] CONSTITUTED-BY [the Agent went (to speak a person)]

The same verb **síí** ‘spend.day’ appears in the transitive chain of 27) below:

- 26) **S^{ag} V¹ V² O^{pat} advl**
 ... **ròd suŋ síící zòd dæu pí, ...**
 ... ròd suŋ síí-cí zòd dæu pí ...
 baby drink spend-hab gruel good only....

 “... (the) baby always drinks only good gruel, ...”
 S30:003

Again it is the degree of manifestation of the event that is at issue in the sentence. The existence of a direct object in the sentence does not change it into a process contour; this object is not at all seen from the point of view of a Patient being progressively affected by the co-event action. Rather the iterated or constantly ongoing drinking of a specific kind of gruel by the agent, is set as figural entity against the ground entity of the passage of time in growing up. The V² verb thus expresses the framing event of Temporal contouring, while the co-event of drinking is standing in a Constitutiveness support relation to it.

Formal version: [the Agent ITERATES an activity] CONSTITUTED-BY [the Agent drink a liquid]

6.2.3 ‘To finish doing’

Passing over to the next verb typical with Temporal contouring, **ba** ‘finish’, recall that we have 6 two-verb chains in the corpus with this verb in V² –position. All of them involve a Patient, either as object or as subject of the chain. It is thus the process application of Temporal contouring on the framing event that is relevant in these chains. The verb **ba** ‘finish’, presents the process from the point of view of completion. In all of these chains we also find **-ki** ‘completive’ to be present, that is, completion to the point where the whole figure has been affected, is added to the lexical meaning of **ba** ‘finish’.

It is important to note with this verb that it is not so much the finishing or ceasing of the action that is at issue; rather it is the completeness of affection of the figural entity. A perhaps equally relevant analysis of these chains would be to see them as having a State change framing event,

involving a change of the affected object from existence to non-existence. Another possibility is to treat them as having a Realization framing event, where the process affecting an object is conceptualized as fulfilled (cfr 6.5 **Error! Reference source not found.**) But we shall treat them here as Temporal contouring since the progress through time is a salient part of their meaning as well.

27) is a straightforward transitive sentence with a two-verb chain:

27) S ^{ag}	V ¹	V ²	O ^{pat}	advl
Kùù	túr	bakiwu	ɲwí	ɗad.
kùú	tur	ba-ki-wú	ɲwi-L	ɗad
grandpa	rake	finish-TOT-pst	3sg-df	early

“Grandfather finished raking his (field) early.”
s44:003

The figural entity of 27) is the direct object ‘his (field)’, it has undergone ‘raking’ and now this process is completed, the field is finished with respect to raking. The finished state of the field can be seen as caused by **tur** ‘rake’, or the field can be seen as totally affected=finished, caused by the activity of **tur** ‘rake’, now finished. The fact that a temporal adverb is chosen to finish off the sentence, is indicative of a Temporal contouring rather than a State change meaning.

Formal version: [the Agent FINISHED the figural entity] WITH-THE-CAUSE-OF [he RAKED it].

Another example, taken from the same story, has the figural entity of the affected patient as subject of the chain:

28) S ^{pat}	V ¹	V ²
....juû	ɗαα	bakirā.
....juú-L	ɗag	ba-ki-rā
....weeds-df	fall-pl	finish-TOT-PFdetr

“.... the juu-weeds have all fallen.”
s43:001

In 28), the Temporal contouring interpretation is even more apt: the co-event of ‘falling’ has been completed, it has touched every single juu-weed stalk in the field. The co-event is here Manner, an activity on the part of the figural entity.

Formal version: [the figural entity is FINISHED] WITH-THE-MANNER-OF [the figural entity FELL]

6.2.4 ‘To return to doing’

The last examples of aspectual distinctions expressed by verb roots in chains, employ **jɪŋ/juɪŋ** ‘return’ in V² –position. As we saw in 6.1, **jɪŋ/juɪŋ** ‘return’ is very frequent in Motion chains, denoting return to a previous location. In 6.1.8 we discussed the glide in meaning from Motion in space to “Motion”

in time, showing that it may readily be used in Temporal contouring chains, as Temporal contouring in time is a metaphorical extension of Motion in space.

In a temporal setting **jɪŋ/juɪŋ** ‘return’ denotes returning to, or doing again, a previous activity.⁵⁰ Our next example shows this: after not having eaten meat for some period of time, the agent starts doing it again, that is, he returns to it, in 29):

29)	S^{ag}	V¹	V²	O^{pat}
	Mi	taŋ	jɪŋkɪrí	nyààŋ.
	mi	taŋ	jɪŋ-ki-rí	nyààŋ
	1sg	eat	return-TOT-PFtr	meat

“I ate meat again.”
txtmisc:004

The only possible interpretation of 29) is a return to the activity mentioned in the V¹ verb, not e.g. a translocational motion while eating. Again it is the Temporal contour itself which acts as figural entity, it is not a process on the patientive direct object that is at issue here. Within the macro-event, **taŋ** ‘eat’ is a constitutive co-event, while **jɪŋ/juɪŋ** ‘return’ is a framing event of Temporal contouring. To distinguish the aspectual meaning of **jɪŋ/juɪŋ** ‘return’ in this case, we have chosen ‘DO.ANEW’ as paraphrase instead of ‘RETURN’.

Formal version: [the Agent DID.ANEW an activity] CONSTITUTED-BY [he ate meat]

The next example harks back to the beginning of this section by employing **yer** ‘begin’, but this time in V¹, not V², position.

30)	V¹	V²	advl
	... yer	jɪŋǎ	nùùŋ sɪm.
	...yer	jɪŋ-a-LH	nùùŋ sɪm
	begin	return-into-imp	how before

“...(you)... should recommence as before.”
txt2:015

The sentence in 30) is a call to go back to the positions taken at the beginning of the story, and so presumably could have been expressed as ‘go-return to (specified) location’, with Motion as framing event. But instead the temporal contour of ‘returning to the beginning’ is used, to the situation as it was before. The chain says to begin again, begin anew. This is marked also in the choice of temporal instead of a locational adverbial phrase.

Both verbs belong to the domain of Temporal contouring, and 30) thus has a pleonastically expressed framing-event. The paraphrase ‘RE-START’ captures the meaning of the chain fairly well.

Formal version: [(the addressees should) RE-START the situation]

A final chain with **jɪŋ/juɪŋ** ‘return’ is presented in 31). The chain is used 3 times in the corpus, but all in the same text speaking of the same event: that of an old chief wanting to transfer his chiefhood to his son. The V¹ –verb is **nɪ** ‘give’, which is discussed at length in 6.4.2.

31)	cm	adv	S^{ag}	V¹	V²	O^{recp}	O^{pat}
	... à	mún	yí	ní	juɪŋri	wú	wàn.
	... à	mún	yí	ní	juɪŋri	wú	wàn.
	... said	today	log	give	return-to	2sg	chief
“.. saying today I give over to you the chieftainship.”							
txt4:015							

In this chain **jɪŋ/juɪŋ** ‘return’ no longer harbors any notion of going back to an earlier location. The “object” given is the state of ‘chiefhood’, the giver is an old chief and the receiver his son. The son never has received it before, and the father has not bestowed it before, either. The sense of **jɪŋ/juɪŋ** ‘return’ must thus be taken as uniquely ‘do another time’ what has been done before, by somebody else.

Formal version: [the Agent DID.ANEW an activity] CONSTITUTED-BY [he gave something to his son]

6.2.5 Summary of Temporal contouring as framing event

We have found 17 chains of Temporal contouring, mostly with the co-event of Constitutiveness with the framing event of Temporal contouring, but Cause, Manner and a pleonasm are also present.

Temporal contouring as framing event has the function of expressing aspect as an event in its own right. Either the Temporal contour itself can act as figural entity in relation to some other point in time, or the affected object of a process can have this role relative to the Temporal contour itself as ground entity. Both of these possibilities are shown in several examples.

Table B-2 of Appendix B presents all the Temporal Contouring chains found in the corpus.

6.3 State change as framing event

We shall continue our analysis of Nizaa two-verb chain by looking at chains with State change as framing event.

State change is the third type of framing event. It consists of a change in, or the unchanging continuation of, a certain property conceived of as associated with a particular object or situation. Its most preferred representation has state itself as ground entity. It is then a property pertaining to a particular object or a situation, while the object or situation acts as figural entity. The activation process, transition or fixity, is change or stasis of the figural entity, which is the object or situation

itself. (Talmy cites two other possibilities, change or stasis in the property itself, or the property as figural entity with respect to the object or situation, Talmy 2000-II: 237)

The association function (the “Path” component) is the direction of the relationship that the object or situation has with respect to the property. This is termed ‘transition type’, and usually involves a movement ‘TO’ the state, for acquiring the association of figural and ground entity.

As Temporal contouring, State change is a metaphorical extension of Motion, with the change or continuation of a state paralleling Motion (MOVE and _{BE}LOC) as activating process. The category of State Change thus covers both ‘change to/from a state’ and ‘be in a state’. The core schema of the state change event is generally the combination of the transition type together with the state. As Motion has Path+Ground as core schema, the core schema of State change is the association function of directionality (“Path”) in acquiring a state (“Ground”), (Talmy 2000-II: 237-8). Again we propose one agentive and one non-agentive schema of the macro-event.

32) *State change schemas*

- a. [the Agent “AMOVED” the figural entity TO A STATE] WITH-THE-SUPPORT-RELATION-OF [the Agent ACTED]
- b. [the figural entity “MOVED” TO A STATE] WITH-THE-SUPPORT-RELATION-OF [the figural entity DID.SOMETHING]

State change is, as framing events generally are, largely abstract in character, including both such properties as ‘existence /non-existence /in possession /dead’, and change in an individual’s cognitive state as ‘become awake /aware /familiar’. The co-event on the other hand is largely more concrete or physical, as ‘battle /run /play /shake /jerk /rot /boil’. The co-event can bear different support relations to the state change frame, Manner and Cause being the most prevalent. This means that ‘result /resultative’ is not characteristic of the whole state change category, but only where the state change is paired with Cause as co-event.

In the following subsections we shall examine the different co-event support relations found with the framing event of State, in the same order as in 6.1 on Motion.

As with Motion, the different types of co-events are unevenly distributed. Cause is the most frequently found co-event, with resultant states such as EXISTENCE/ NON-EXISTENCE/ FULLNESS/ etc. as framing event. Different cognitive states, like TO BE(COME) CONTENT/ AWAKE/ SATISFIED etc, also often occur with a Cause co-event. Manner on the other hand, with some activity or process on the part of the Figure as part of acquiring a state, is less frequent. Constitutiveness is very much less present than with Temporal contouring. Pleonasms exist, but are few as compared to the chains with Motion as framing event. The reader is referred to Table B-3 in Appendix B for a complete list of the chains of State change in the corpus.

6.3.1 Precursion

We saw in 6.1.1 that Precursion was not found with Motion in the corpus. This does not mean that the category of Precursion is non-existent with Nizaa chains. We will propose 33) as a chain having a support relation of Precursion between V² as framing verb and V¹ as co-event verb.

33) S ^{fr}	V ¹	V ²
Saari	see	nzaŋkírá.
saari-L	see	nzaŋ-ki-rá
morningDF	be.red	be.clear-TOT-past-detr.

“The morning grew bright.”
txt4:020

In this sentence, which is a rather standard way of saying ‘Day came’, the V¹ verb appears to have two possible meanings, either ‘be.red’ or ‘awaken; be.awake’. The first meaning is somewhat better attested in my material and thus is chosen here. (It seems to be this other meaning that is present in an other chain of the corpus, see Appendix B, Table B –3).

We consequently take 33) to mean that the sky becomes red, then clear and bright. This is of course based on a very frequently observed phenomenon, the fact that the sky goes red before daylight proper comes. Still, the reddening of the sky can hardly be understood as causing or enabling the day to come, for daylight will come even on rainy, cloudy days with no visible red sky, a fact which is just as observable and common. We venture the opinion that the support relation of precursion would be the same also in the case of the other meaning of the V¹ verb cited above.

Formal version: [The figural entity “MOVED” to a STATE [BEING clear]] WITH-THE-PRECURSION-OF [it became red].

6.3.2 Enablement

We have in the corpus several chains with a motion verb in first position. A number of them have been accounted for above in 6.1.8, where we understood them to be pleonastic expressions of Motion framing events. But some of them have other framing events, as Temporal contouring in 25) above. Others appear with a framing event of State change. This shows that even though Motion is said to be the prototype of all the other semantic domains, the presence of a motion verb, and of translocational motion in itself, do not automatically designate the macro-event of a chain as framed by Motion. For this to be the case in Nizaa, there must be an element of motion in the final verb of the chain.

This is not the case in 34) where **di** ‘come’ is V¹ with **kwæ** ‘find’ as V². We take **kwæ** ‘find’ to denote a change of cognitive state on the part of the finder, i.e. it can be glossed as BECOME.AWARE.OF the figural entity.

- 34) Aux O^{pat} V¹ V²
 ...ā nām di kwεεkiwí.
 ...ā nām-L di kwεε -ki-wí
aux hyena-DF come find -cmpl –past

“...when (he) came and found the hyena.”
 txt2:004

This example is the last clause of a sentence of which the first clause introduces a new participant to the scene of this particular story (“A monkey was roaming about in the bush looking for tree nuts to eat...”). This first clause is typical supportive material. Then our clause (“when he came and found the hyena”) with the meeting of the main characters starts the story proper. In the second clause then, the event of finding is more important than the event of coming, since it is this event that hooks the supportive material on to the storyline. As we remember, Hypothesis 8 predicted that this function belongs to the framing event. Thus the motion verb present in the chain in the V¹ is not framing event in this chain, but its event of ‘coming’ enables the ‘finding’.⁵¹

Again we see the typical integrated viewpoint of the chain structure, expressed in Hypothesis 1: the coming and the finding seems to occur more or less simultaneously, at least any temporal distance between them is not focused upon.

Formal version: [the Experiencer “MOVED” to a STATE [BEING aware of the figural entity]]
 WITH-THE-ENABLEMENT-OF [he came to a location]

6.3.3 Cause

As noted above, Cause is fairly frequent with State change –half the chains have this co-event, paired with result framing events. We shall therefore cite several examples of this co-event support relation.

Existence/non-existence:

The Agent of the chain below is stating that he is going to kill a friend of his by stabbing him, a chain of Cause and Result if any.

- 35) S^{ag} V¹ O^{pat} V¹ V²
 yí ge yí mǎǎ sós kúkiwà ...
 yí ge yí mǎǎ sós kú-ki-wà ...
 1sg go 1sg friend stab die-TOT-sub...

“.... I'm going to stab my friend to death,...”
 txt4:032

The chain of 35) is in a subordinated clause, the object of the chain is consequently placed in front of the subjunctive verb chain, and the subject is expressed in the matrix clause only. Interestingly, the V² verb is **kú** ‘die’, not **jim** ‘kill’, the chain is thus yet another example of the ‘different participant-

reading’ of the two verbs of the chain noted in 6.1.3. This also highlights the change of state on the part of the figural entity as the ‘upshot’ of the whole chain, pointing again to the V² verb as expressing the framing event.

Formal version: [the Agent will “_AMOVE” the figural entity to a STATE [BEING dead]] WITH-THE-CAUSE-OF [he will stab him].

Fullness

The next example is less dramatic, but still involves a change of state, this time from EMPTINESS to FULLNESS. That is, we take **yír** ‘fill’ to signal a change of state, but another possible analysis would be to see the chain of 36) below as an event of Motion, comparative to Talmy’s example *I poured the tub full of water*, Talmy 2000-II: 124. We shall have a closer look on his treatment of this sentence before moving over to our Nizaa example.

Talmy discusses here different patterns of Figure and Ground, saying that different languages may require different precedence patterns according to the notions expressed in the framing element. English requires Ground above Figure in the above example of expressing Motion of the Figure to *all over* the interior of the Ground. This is shown by the choice of syntactic categories: the Ground in this case selects direct object and the Figure selects a prepositional phrase. If the notion of ‘all over’ (FULLNESS) is not present, the precedence pattern are reversed as in *I poured water into the tub*.

Nizaa, with its different conflation pattern, exploits other possibilities in 36):

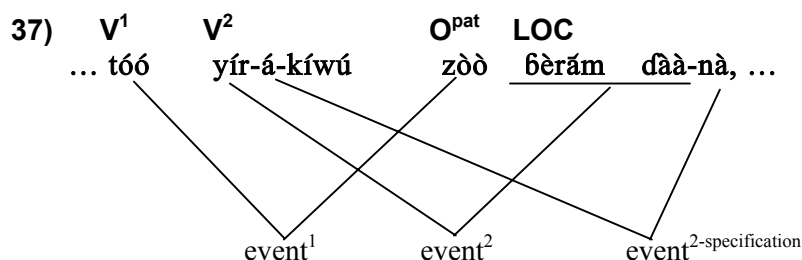
36)	... V ¹	V ²	O ^{pat}	LOC
...	tóó	yírákíwú	zòò	bèrám dāàná, ...
...	tóó	yír-a-ki-wú	zòò	bèrám dāà-nà...
...	spoon	fill-into-TOT-pst	gruel	bowl-dim other-in ...

“...Boram fills a little bowl by spooning gruel into it/spoons a little bowl full of gruel/fills up a little bowl with gruel ..”
s30:002

The sentence in 36) actually does not translate effortlessly into English, as shown by the several proposed translations.⁵² The most colloquial one is the last, but it contains less information than the Nizaa original –*how* Boram caused the bowl to become filled, is left out. This gapping of an intermediate link in the causal chain is common in English, (Talmy 2000-I: 271-274), but not necessarily so in Nizaa (see also 5.3). We can thus paraphrase the English translation of 36) as : [The Agent _AFILL a liquid into a recipient by LIFTING-WITH-A-SPOON], but it still does not quite do justice to the Nizaa sentence, which has both Cause and State change backgrounded by expressing them within the verb complex.

The syntactic structure of the Nizaa sentence is for this reason quite more convoluted than its English counterparts. An attempt to show the assignment of the arguments to the verbs involved

would look something like 37) below.⁵³ The V¹ verb has its Patient direct object, the liquid that is ‘spooned.up’, the V² verb has its locative argument, the volume or recipient that is filled, and finally the derivational suffix **-á-** ‘into’ has its counterpart in the locative suffix **-nà** ‘in, on’. The last assignment is labelled ‘specification’ of event² since it associates the figural entity (the little cup) with the property FULLNESS, which acts as ground entity. It uses a directional suffix to mark the transition type of acquiring a state and thus is paralleling Path (Talmy 2000-II: 238).



A structure like 37) admits a specified co-event of Cause into the verbal complex, in the V¹ verb. The V² verb expresses as usual the framing event, the attained state of FULLNESS. Again there is a close connection between the V¹ verb and the derivational suffix, as we saw in 17) above.

Formal version: [the Agent “MOVED” the figural entity to a STATE [BEING full]] WITH-THE-CAUSE-OF [she SPOONED gruel INTO it]

Would an analysis along the lines of Motion as framing event be closer to the mark? To see this as a Motion event, one would need to regard the derivational suffix of **-á-** ‘into’ as capable of expressing a framing event of Motion alone. The Direct Object **zòò** ‘gruel’ would be considered the Figure and **bèrám dàà-nà** ‘in a cup’ would be the Ground. The Cause co-event would be the same, and linked more strongly to the derivational suffix (something we also noted in the treatment of 17) above), but how should we place the event of V²? By itself it denotes a state of fullness, not Motion.

In this case we have chosen State change as framing event, partly because we understand the directional suffixes as providing only conformational and deictic components of the Path, while the Vector component resides with the verb, cfr **Hypothesis 7**. A Motion analysis would run counter to this proposition, putting too much emphasis on the derivational suffixes.

Coolness:

To become hot or cold represents a change in state. The next chain employs the same V¹ verb as the previous example, but with a V² verb denoting cooling. The chain is subordinated under the modal verb **yer** ‘begin’.

38)	V¹	V¹	V^{2-sub}
	...yera <u>wu</u>	<u>tóó</u>	<u>kèŋwwà</u> .
	...yera-wũ	tóó	keŋw-wà
	....begin-pst	spoon	cool-to

“...(Buram) ...starts spooning (the gruel) up to cool it.”

s30:001

In contrast to the preceding chain, taken from the same text, **tóó** ‘spoon’ is not used here to indicate any translational movement of the figure. Instead it describes the activity of lifting hot liquid with a large spoon and let it fall down again in the same recipient several times to cool it down before drinking it. The figural entity (the gruel) thus acquires the state of COOLNESS (or comfortable temperature), as a result of the ‘spooning’ done by the agent. There is no morphological marker of a repeated **tóó** ‘spoon’, but the use of **yera** ‘begin’ in the matrix clause signals a prolonged activity, only partially manifested in the example⁵⁴.

Formal version: [the Agent “MOVES” the figural entity to a STATE [BEING cool]] WITH-THE-CAUSE-OF [the Agent SPOONS it up (several times)]

6.3.4 Manner

Leaving the support relation of Cause, we turn to Manner, of which there are considerably less occurrences in the corpus. As noted before, it often is close to the co-event of Cause, but is distinguished by being predicated of the Figure/the figural entity instead of the Agent/subject. The states treated in this section are BE.AWAKE and ARRANGEMENT.

Wakefulness

To ‘wake up’ is a change of state, from sleeping to being awake. The V² -verb of 39) denotes the change of state of becoming awake, to wake up.

39)	S^{exp}	V¹	V²	cm
	ŋu táá	ké	sααŋkirē	à ...
	ŋwi táá	kē	sααŋ-ki-rē	ǎ ...
	3s father	start	awaken-TOT-v.detr	said ..

“His father was startled awake, saying...”

txt4:025

In 39) there is no explicit mention of anything causing the waking up of the subject (in the preceding sentence he is addressed by another person). The V¹ -verb denotes the co-event of the Manner of the waking up, with a start or a jump.

Formal version: [the figural entity “MOVES” to a STATE [BEING awake]] WITH-THE-MANNER-OF [he starts]

We shall continue to look at Manner co-events turning to a negative chain with **reŋw** ‘arrange; put.in.order’.

40)	S ^{fr}	O ^{pat}	V ¹	V ²	Neg	
	...yéŋw	gwàw	ŋu	gwaw	rèŋw-wà	fá.
	...yéŋw	gwaw	ŋwi	gwaw	reŋw-wà	fá
	...thing	hurt	3s	ache	arrange-neg	not

“... sickness never makes him suffer.”
s30:003

40) is negated with a negative particle denoting a negative assertion: there is no doubt that the negation holds. **fá** ‘not’ is in non-verbal clauses in complementary distribution with the auxiliary **á**, they are used to refer to the existence vs. the non-existence of objects. Used for verbal negation, **fá** ‘not’ retains the notion of a static property holding of the proposition. Like the other negative particles, it is sentence-final, relegating the direct object to a preverbal position. The negation has scope over the framing event.

gwaw ‘ache’ is, like English ‘suffer’, inherently patientive, that is, it normally has the Experiencer as subject. The subject may also be the ailment itself, seen as force acting on the sick person. The word for ‘sickness, ailment’ is based on this verb: **yéŋw gwàw** ‘thing-ache’⁵⁵. To ‘ache, suffer’ is a state in itself.

The V² verb is **reŋw** ‘arrange; put.in.order’. It is often used of a state of ARRANGEMENT, or rather WELL-ARRANGEDNESS, but with quite a wide range of uses in both simplexes and chains, from the Creator ‘arranging’ the world in the beginning, to a road scraper ‘arranging’ the roads. In this usage, there is an idea of ‘making’ or ‘putting into existence’ by arranging items in the right pattern, to order them. Adding some important ingredient to a mixture to complete its makeup is also seen as an act of **reŋw**. The extension of its meaning towards simply ‘make’ is seen in the negated chain below, where **reŋw** hardly can be said to mean ‘arrange’. It is also used in less concrete contexts, i.e. of greeting in a proper fashion, thus maintaining order.

The negation of **reŋw** ‘arrange’ provides 40) with ‘make not’ as the relevant event of framing. It can be paraphrased metaphorically as NOT “MOVE” to a STATE. The Patient object of this event is also the Patient of **gwaw** ‘hurt’ and acts as figural entity of the sentence. **yéŋw gwàw** ‘sickness’ is here the subject, with a semantic role of Force acting on the object, or in this case, not acting.

Formal version: It is NOT the case that [a Force “MOVES” the figural entity to a STATE [BEING sick]] WITH-THE-MANNER-OF- [the figural entity ACHES]

6.3.5 Concomitance

As an example of the co-event support relation of concomitance, we shall use a clause from a sentence already employed twice above (exs 26), of Temporal contouring and 40), of State change and Manner). In the present clause a support relation of concomitance exists between the two verbs. A

concomitance relation has the co-event occurring together with the framing event without there being any causal relationship between them: they only happen at more or less the same time, and are pertaining to the same entity.

- 41) **S^{exp}** **V¹** **V²** **adv**
ròò **gib** **baŋkíwú** **lèè,**
ròò **gib** **bááŋ-ki-wú** **lèè**
baby **be.big** **be.beautiful-TOT-stative** **so**

“.... the baby has grown so big and
 beautiful,”
 s30:003

In 41) both verbs denote a state, that of being or growing to BIGNESS and that of being or growing to BEAUTY. Both states are relative, BIGNESS more clearly so, since this characteristic always must be relative to some standard: a big baby is still small compared to a ten-year old child or a grown-up.

Between them we take the V² verb to express the framing event, in accordance with **Hypothesis 3**: it frames the content of both verbs in a specific way by giving a positive evaluation of the totality. The state change of growing to BIGNESS is not necessarily a part of growing to BEAUTY, though the two events often go hand in hand. Instead it is in this case only concomitant with attaining beauty. The chain thus is not pleonastically expressing the framing event. Though both verbs pertain to state change, they are not co-extensive, since the one well may occur without the other.

The same chain, only marked for a plural subject on the verbs, occurs in a similar context once more in the corpus, speaking of chickens that will grow big and nice.

Formal version: [the figural entity has “MOVED” to a STATE [BEING BEAUTIFUL]]
 CONCOMITANT-WITH [he has GROWN]

6.3.6 Subsequence

Moving over to the co-event support relation of subsequence, we shall examine two more chains with **reŋw** ‘arrange; put in order’.

- 42) **S^{pat}** **V¹** **V²** **sbn**
kùù **wûr** **nzán** **rèŋwkiwu** **lô ...**
kùù **wûr-L** **nzan** **reŋw-ki-wú** **lô ...**
grandpa **field-df** **clean** **arrange-TOT-pst** **as ...**

“....that grandfather's field had been properly cleaned up”
 s43:002

The V² -verb of 42) is denoting the state of being in order, well arranged. This state has been obtained by people working on the field acting as figural entity, clearing it of weeds: it is now in a state of cleanness with respect to weeds. **nzánj** 'be. clean, pure' denotes the negative end of a scale of 'dirtiness', i.e. the non-existence of some element considered unwanted in relation to a ground (Givón 2001: 84). We regard this as a co-event of Subsequence since it is a result of the different activities summed up and referred to by **renjw** 'arrange; put in order'.

Formal version: [the figural entity "MOVED" to a STATE [BEING well-arranged] WITH-THE-SUBSEQUENCE-OF [it was CLEAN]

The next chain is negative, as was the case with 40) above. The remarks made on the semantics of the negative particle hold for this context as well.

- 43) **S^{pat}** **V¹** **V²** **Neg**
 **nyûr** **dib** **rènjw-à** **fá,**
 ... nyûr-L **dib** **rènjw-à** **fá,**
 voice-df exit arrange-neg not, ...
- ".... the voice doesn't come properly out,..."
 s39:001

Interestingly, **dib/diw** 'exit' is again in V¹ position for a co-event of Subsequence, as was the case with Motion as well (ex 13). But instead of being framed by a Motion event specifying the preliminary of passing through an opening to get out, the present chain has a framing event of State change, specifying a state of order, the way things should be in order to be working. The negation of the framing event bars the subsequent co-event from taking place.

The chain also neatly shows that the presence of a motion verb as V¹ does not make it into a Motion event, as noted before in 6.3.2. In the present case it is not even a real motion going on at all: **dib/diw** 'exit' refers metaphorically to the sound of the voice as "coming out" of the mouth of the speaker, i.e. as becoming audible.

Formal version: It is NOT the case that [the figural entity is "BELOC" at a STATE [BEING well-arranged]] WITH-THE-SUB-SEQUENCE -OF [the figural entity "MOVES OUT" (is audible)]

6.3.7 Constitutiveness

A Change of state event 'shaping' a substrate co-event can be shown to exist in several cases in the corpus: We shall cite one of two chains with the verb **ke** 'know', and one of two chains with the already familiar verb **renjw** 'arrange; put in order', beginning with the last one.

- 44) **S^{ag}** **V¹** **V²**
 **móówu** **kwaw** **reṅwkirē**, ...
 móó-wu kwaw reṅw-ki-rē, ...
 indf-pl greet arrange-TOT-v.detr. ...

“..., people greeted properly, ...”
 txt5:006

The sentence from which 44) is taken from is elliptical, leaving out the figural entity in the first clauses and reintroducing it overtly only in the last clause. This is possible since the figural entity already is established in the context, as two persons arriving in a village they never have been to before. Upon arrival these persons are then greeted by the villagers, referred to by the indefinite plural noun **móówu** ‘people’. To greet a stranger properly is a fairly important trait of Nizaa society, it may well be conceptualized as putting the relationship in good order, by establishing recognizable roles for both guest and the host. It is thus not surprising that it should be **reṅw** ‘arrange; put in order’ that is used as framing event verb in this context. The actual content of this ‘ordering’ or ‘arranging’ is the act of greeting (which in an African context usually is a lengthy session of questions and answers of personal and familial well-being, etc).

Formal version: [the Agents “_AMOVED” the figural entity to a STATE [BEING well-arranged]]
 CONSTITUTED-BY [they greeted them]

The cognitive state of having knowledge or know-how⁵⁶, is perhaps easier seen as amenable to the idea of an added ‘content’ event that constitutes the knowledge. Such a chain is presented in 45) below.

- 45) **O: ReIS** [**S^{exp}** **V¹** **V²** **O^{pat}**]
 ... **njéèṅ** **nàw** **pííṅ** **kecí** **yéṅwtâṅ** **lwám** **lwam** ...
 ... njéèṅ nàw pííṅ kecí yéṅwtâṅ **lwám** **lwam**
 ... woman-pl person-pl make know-hab food much much

“... women, people who know how to make
 lots and lots of food...”
 txt5:014

The chain is the core of a relative clause characterizing a group of women. They act as figural entity with a fixed, or “located” relationship to the state of knowledge, the ground entity. The overt object of the clause, **yéṅwtâṅ lwám lwam** ‘lots and lots of food’, cannot be the figural entity; at most it complements the constitutive co-event, by narrowing the rather wide meaning of **pííṅ** ‘make’ down to ‘cook’, and by pointing to the amount of the food as a relevant parameter within the context of the story. The two preceding chains also give a nice illustration of Talmy’s point concerning the palpable, concrete character of a co-event as compared to the more abstract and less observable framing event (Talmy 2000-II: 219).

Formal version: [the figural entity “_{BE}LOC” at a STATE [HAVING know-how]] CONSTITUTED-BY [the figural entity COOKS large amounts of food]

6.3.8 Summary of State change as framing event

There are 24 chains with the framing event of State change in the corpus. 8 of these are with the co-event of Cause, which thus constitutes the largest co-event group. Precursion, Enablement, Manner, Concomitance, Subsequence and Constitutiveness are also present, while Concurrent result has proved impossible to discover with this framing event as well. No pleonastic chains have been found. Among the different co-events, Cause was again treated most thoroughly.

Hypothesis 3 and Hypothesis 4 are again supported by the data: the framing event of State change is consistently placed in the V² position verb, and the co-event in the V¹ position verb. The weaker nature of the derivational suffixes as compared to framing event verbs was noted in treating a chain with FULLNESS as State change framing event, cfr Hypothesis 7. Several other states or state changes were discussed.

Table B –3 of Appendix B show all the chains assigned to the framing event of State Change.

6.4 Action correlating

When passing over to the next type of framing event, we are also leaving the fairly obvious metaphoric relationship existing between Motion and the other two framing events treated hitherto, Temporal contouring and State change. Still, Talmy 2000-II make a good case for considering also the next type of complex events as macro-events consisting of framing event and co-event, and for building a core schema analogous with Motion. Let us first describe this framing event type in some detail.

Action correlating⁵⁷ is, according to Talmy, akin to a broader phenomenon that can be termed **coactivity**, where a first agency executing an activity is associated with a second agency whose activity is correlated with the first. This second activity is either comparable to or complementary to the first activity. The first agency is often a subject NP and the second an object NP. Coactive objects are typically required by symmetric verbs, comitatives, and datives. The sentence ‘*I ran after Jane*’ is given as an illustration, since it is required that Jane also engages in swift forward motion for this sentence to be correct.

Action correlating as framing event is a narrowing down of this general concept of co-activity. By Action correlating, an intentional Agent effects or maintains a particular correlation between an action performed by herself and an action performed by another Agency. The framing event consists of the establishment of this correlation per se.

The core schema of all the types of Action correlating is seen as analogous to the Motion schema of Path (+Ground): the correlation of one action with respect to another parallels the path of one object with respect to another. The Agent's action is thus placed as figural entity in correlation with an Agency's action as ground entity. The co-event is the specific action performed by the Agent. The co-event bears a constitutive support relation to the framing event, since it is the specific activity of the co-event that constitutes the actions to be correlated (Talmy 2000-II: 253-5). Talmy schematizes the macro-event in two different ways (Talmy 2000-II: 255), where the b. version is an adaptation that is closer to the languages used in his examples (English, German, Spanish):

46) *Action correlation schemas*

- a. [Agent PUT Agent's Action In-Correlation-With Agency's Action'] CONSTITUTED-BY [Agent PERFORM]
- b. [Agent ACT In-Correlation-With Agency] CONSTITUTED-BY [Agent PERFORM]

The typological distinction between verb-framed and satellite-framed languages appears in this framing event type as well. In satellite-framed languages the core schema maps onto a satellite (plus adposition), and the co-event maps into the main verb. In verb-framed languages, the combination of the ACT component and the core schema maps onto the main verb (plus adposition) and the co-event maps onto an adjunct. The different types of Action correlating are also to some extent language-specific, so that one language can have only a few or several more of the categories cited below as existing within this framing event.

The correlation types cited by Talmy are 'concert', 'accompaniment', 'imitation', 'surpassment' and 'demonstration'. In the first four types, verb-framed and satellite-framed languages seem to differ on the expression of the nature of the Agent's Action: the Agent and the Agency may perform the 'same action' or 'same-category action' in satellite-framed languages, while verb-framed languages (at least Spanish) allow only the 'same action'-interpretation in the co-event adjunct. A non-identical action must be structurally distinguished even if it is of the same category.

Making music may be used as an example both of Action correlating as such and of the difference between same event and same-category events. When saying in English *John played along with him/the phonograph record*, there is a correlation of the action of John and that of the other Agency. This activity may consist of John's playing the same melody as the other, or rendering a different part, or accompanying a singer's voice. When playing the same melody the activity is 'same', in the other cases it is 'same-category' (Talmy 2000-II: 257-259).

The last type, 'demonstration', has the Agent and the Agency performing different-category actions. In a typical situation of demonstration, the Agent executes an activity so that the Agency can register it either as information about the Agent or as a model for performing the same activity. The

whole situation can have the metaphoric sense of transfer from the Agent to the Agency. One difference from the preceding types is that here the Agency's activity, typically observation, is fixed, and as such it regularly diverges from the Agent's activity. This stretches the notion of correlating from interrelating identical or comparable activities, to a coordination of complementary activities (i.e. demonstration and observation). However, the case of 'demonstration' is still akin to the other types of correlation by virtue of relating the activity of one entity to the activity of the other entity. A revision of the schematization given above is nevertheless necessary (Talmy 2000-II: 260-61).

47) *Action correlation schemas revised for demonstration*

- a. [Agent PUT Agent's Action In-Demonstration-To Agency's OBSERVATION]
CONSTITUTED-BY [Agent PERFORM]
- b. [Agent ACT In-Demonstration-To Agency] CONSTITUTED-BY [Agent PERFORM]

It is the linguistic expression used for correlated actions that is of interest here, not the interaction as such between two entities. The linguistic expression points to a conceptualization of two events as being in a certain relation to each other, and without this conceptualization or understanding, the linguistic expression would be different. The actions as such, as physically occurring events, can take place independently of any understanding of the two as comparable or complementary events.

A point in case may be the difference of expression of 'concert' and 'accompaniment' as exemplified in the following sentences. *I jog together with him* suggests a regular schedule of jointly executed activity, while *I jog along with him* rather suggests that the other person has his own independent routine where the speaker occasionally joins him. But seen as activity per se, without any conceptual overlay, the two situations are physically the same: two persons jogging along the same path.

In the case of Nizaa, and more particularly Nizaa verb chains, it is important not to lose sight of the fact that both verbs in chains are predicated of the subject, and not of a second agency. But when the final verb has meaning elements of coactivity, it frames the first verb as Action correlating. We shall therefore in the following paragraphs discuss such coactive verbs used in final position. First we will consider two verbs belonging to the categories comitative and dative verbs mentioned above. Then we shall look at two verbs originally belonging to the motion domain but used in dialogue situations with Action correlating framing effect, before finishing with a special use of one of these verbs.

6.4.1 Comitative with **yááŋ** 'be.together'

There are in the corpus 6 chains with the final position verb **yááŋ** 'assemble; be.together' (one of these chains consists of **yááŋ** reduplicated). We have already noted instances where this verb has a

motion reading, denoting ‘assemble’ rather than ‘being. together’ (8) and 10)). But in 48) and 49) below, the comitative is the only possible reading:

48) S^{ag}	V¹	V²	O^{pat}	LOC
Móówu	swεε	γααηwú	kùù	kútō.
Móówu	swεε	γααηwú	kùù	kútō.
indef-pl	tease	be.together	grandpa	there.

“They teased grandpa together there.”
s39:005

49) S^{ag}	V¹	V²	O^{pat}
Nitāηw	gbom	γααηkí	kùùkúú.
Nitāηw	gbom	γααηkí	kùùkúú.
People	scoff.at	be.together	grandpa

“The crowd scoffed noisily at grandpa.”
s40:001

The two sentences are taken from the end of one primer-text and the beginning of the next respectively, and refer to the same happening. Both have indefinite plural subjects, it is a crowd of villagers not further specified that are teasing and making a loud noise at an unhappy individual. But the comitative effect of γααη ‘be.together’ is uniquely on the side of the multiplex subject: the object NP is not part of the merry-making; instead he is the butt of the jokes. Within the multiplex subject there is a correlation of actions, though: the use of γααη points precisely to a joint effort, rather than single actions by unrelated individuals. It also strongly emphasizes the actions of everybody as being the ‘same’, a phenomenon that Talmy proposes as to be characteristic for verb-framed languages (Talmy 2000-II: 257).

The most important difference with the schemas above is the grouping together of Agent and ‘second agency’ within the subject. There is thus a backgrounding of a second agency’s action acting as reference point or ground entity. Also, it seems difficult to assign the status of figural entity to the Agent’s action, since the latter encompasses the activity of the ‘second Agency’ and is not clearly distinguished from it. It is rather the object of the two sentences that acts as figural entity.

Still it is possible to recognize the Action correlating type of ‘concert’ in the Nizaa chains above: it is the type that has the least conceptual distance between the actions of the involved participants. The actions are ‘*equipotent components of a joint unity, perhaps with each component as essential for the existence of the whole*’ (Talmy 2000-II: 256)

Nizaa expresses this correlation in one of the verb roots of the verb complex, not in a satellite, which we take to be another pointer in the direction of classifying Nizaa as a verb-framed language.

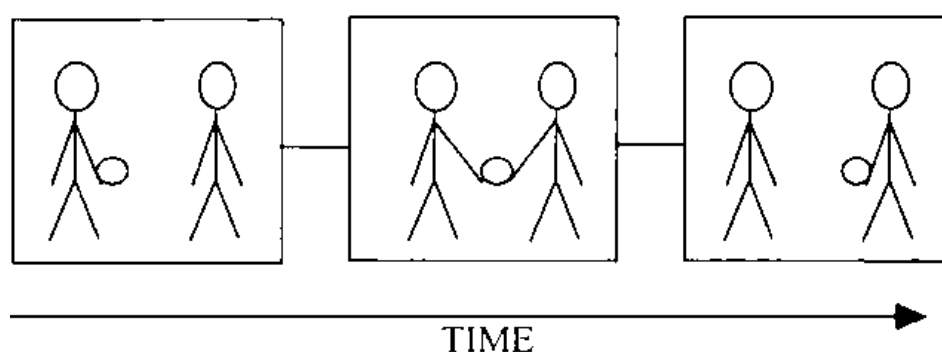
Formal version: [multiple Agents ACTED IN-CONCERT] CONSTITUTED-BY [they teased/scoffed at the figural entity]

6.4.2 Dative with *ni* ‘give’

‘Dative’ is traditionally the label put on a certain case marking in languages with rich noun morphology, e.g. German, where it is used with nominal phrases with a recipient or a Benefactive role. The label is sometimes extended to verbs typically occurring with such case-marked NP’s, called ‘dative’ events. Nizaa has a single verb used with both recipient and Benefactive object NP’s, and so the concept of ‘dative’ comes in handy, connecting these two notions.

The notion of GIVE prototypically denotes the transfer of a THING from a GIVER to a RECEIVER. The figure below is taken from Fagerli 2001 and shows a basic GIVE event.

Figure 6-1 Basic GIVE event



Different subparts may be focused on and extended to denote other more abstract meanings, i.e. a very common meaning extension of the THING is to denote other events of which the RECEIVER is the beneficiary. Or the movement to the RECEIVER is extended to describe movement to a goal, giving an allative reading of the GIVE element. Interestingly, Fagerli also points to the energy flow element in giving, with the GIVER as an ‘energy source’, and the RECEIVER as an ‘energy sink’. The energy consists of a mental activity on the part of both GIVER and RECEIVER, and physical movement of all three participants. (Fagerli 2001: 205, citing Langacker 1991: 292). The concept of coactivity is quite close to this observation.

As a basic event, GIVE can within the framework adopted in this thesis be treated as a Motion-framed event with the transferred object as Figure and the Receiver as Ground. There are chains in our corpus that must be analysed thus, those where *ni* ‘give’ is introducing a locative argument, or where it is used in first position and consequently has another framing event (ex 31). Our proposition is that Action correlating constitutes another possibility of analysis for two substantial groups of chains with *ni* ‘give’ as final verb. Let us first review some facts of this Nizaa verb.

ni ‘give’ is very frequent in chains, and mostly appearing in the final position (cfr 3.2 and 3.3). Its contribution to the chain is on the one hand syntactic: it signals or introduces a recipient or a

beneficiary, placed directly after this verb and before the direct object. On the other hand it contributes semantically with the notion of GIVE. The thing GIVEN can be a physical object or speech, in which case the following NP will be the Recipient (O^{recp}). It can also be the other action(s) of the chain; the following NP will then have a Benefactive role (O^{ben}).

There is also a third possibility, that of an allative meaning with an (optional) locative NP following. This can be treated either as an extension of the Recipient role to include locations that ‘receive’ a moved entity, or as an allomorph of the derivational suffix **-ri** ‘hither, towards’ referring to the deictic centre of the sentence⁵⁸. In the last case, there are no obvious phonotactic rules for the choice of allomorph. In the following paragraphs we will postulate a verb status for **ni** ‘give’ also in cases where its use is clearly allative.

It is important to notice that **ni** ‘give’ can be placed in between the derivational and inflectional suffixes of a chain, thus breaking up the unity of the chain to some degree. With the possible exception of **se** ‘see’, **ni** ‘give’ is the only verb with this behaviour in chains. As proposed in Hypothesis 2, this means a looser conceptual integration of the events. This looser integration may be present even in cases where there is no overt suffix between **ni** ‘give’ and the preceding verb, since not all chains have suffixes.

Moving over now to coactivity and Action correlating, we will use these concepts to describe the use of **ni** ‘give’ in chains along the following lines: An act of giving normally requires some activity on the part of the receiver. This simple fact, captured also in Figure 6-1, points to coactivity as a relevant category for a semantic analysis. It can be seen in comparing two physically similar acts with and without the notion of GIVE, such as that of transferring a physical object. Without the notion of GIVE, one can say i.e. *I put the ball in the hand of the child/the mannequin*, (provided that the hand of the mannequin is positioned so that it can support a ball.) But with the notion of GIVE, many inanimates are ineligible as recipients. This holds true not only of the specific verb ‘give’ but also of other acts including a component of giving. Thus it is impossible to say *I gave/threw/showed the ball to the mannequin* while *I gave/ threw/showed the ball to the child* works fine. The difference of the two cases is precisely the coactivity required along with GIVE. With this in mind we can turn to some Nizaa chains, starting with two that involve physical transfer.

*Physical transfer with **ni** ‘give’*

The first chain we shall look at in this section is purely locative, and first and foremost presented here to serve as basis of comparison with the next chain.

- 50) S^{fr} V¹ V²
 Súúsùù jùùnjirā,
 súúsùù jìj -ni -rā
 early.rains return-give -PFdetr.
 " The first rains have come back,"
 s37:002

The sentence of 50) is not agentive, and so it may seem strange to speak of a ‘transfer’ at all. But ‘rain’ is its own event, so to speak, it is inherently a movement of the raindrops, and so a movement or a transfer of the figure is present here (Talmy 2000-II: 57). There is no animate entity on the receiving end, though, only the location in general, the broader area as arranged around the focal point of the main character (our old friend ‘grandpa’). The V² –verb **ni** ‘give’ is used allatively, ‘giving’ to a location means coming there.

The V¹ –verb is **jìj/jùùj** ‘return’ and the present chain is the only occurrence in the corpus (and, we suspect generally) of this verb in V¹ –position. The chain itself is frequent enough in everyday speech, though, it is the standard expression of saying ‘NN has come back’. **jìj/jùùj** ‘return’ is a motion verb, and together with the allative meaning of **ni** ‘give’, the chain is defined as a pleonastically expressed Motion event.

Formal version: [the Figure MOVED TO a previous location (it came back)]

The next chain also speaks of physical transfer, but here there *is* a recipient and the allative meaning of **ni** ‘give’ is not very likely, rather we are now entering the domain of Action correlating.

- 51) S^{ag} V¹ V² O^{pat} Loc
 Ndún gìw túgá ni twâm 6wanā, ...
 Ndún gìw túg-á ni twâm 6wanā, ...
 man big spit-into give spittle hand-in
 “The old man spat saliva into the hand,”
 txt4:015

In 51) there is a locative element, but it is hardly governed by **ni** ‘give’, as it appears after the direct object. It must rather be seen as a counterpart of **-a-** ‘into’, as in 36) above. Ex. 33) also offers an interesting parallel of movement of a liquid into a recipient, without employing **ni** ‘give’. We thus take the recipient element of 51) to be in ellipsis, not overtly mentioned, but understood from the preceding sentence. Let us look closer at the context to see how coactivity is present.

In the 4 preceding sentences the Agent of 51), an old chief, tells his son to stretch out his hand, and the son complies. The old man coughs and put some slime in the boy’s hand telling him to swallow it, again he complies. Then our example of 51) repeats the essentials of the procedure, going

on to cite the old man's idea of the act: 'Today I have given over to you the chieftainship' (cfr 31) for the Nizaa version). The son is thus clearly the recipient of 51) and, more important to us, he is coactive in the procedure of transferring the chieftainship by means of saliva. The actions of the two parties are correlated, not directly as concert or accompaniment, but as complementary actions instigated by the old man as the giver. In this perspective 51) exhibits an Action correlating framing event in the use of **ni** 'give' as final verb. The use of this verb underlines the Agent as the active part in the coordinating, while the Recipient has a smaller role. Going beyond Talmy's same event or same-category events of the two parties, we propose 'coordination' of acts as a type of Action correlating.

Formal version: [the Agent PUT Agent's action IN-COORDINATION-TO the Agency's POSITIONING] CONSTITUTED-BY [the Agent spat in his hand]

*Utterance verbs with **ni** 'give'*

The largest group of chains with **ni** 'give' as final verb and a Recipient role for the following NP, is as second verb to an utterance verb. In these cases the Action correlating consists of a 'getting through' to the addressee, that is, he must be listening and actually receive the message. There is thus a fixed activity of listening on the part of the Agency, while the activity of the Agent is to utter a message.

However, it is interesting to note that **ni** 'give' is not used with all utterance verbs. The ones registered in the corpus as not appearing with **ni** 'give' are **ḡḡg/ ḡḡo** 'call, order.hither' and **sweeŋ** 'ask'. Though these utterance verbs certainly signals an expectation on the part of the speaker, of an activity on the part of the listener, it seems that they are not conceptualized as correlated actions in the sense described above. This division within the group of utterance verbs makes it difficult to regard **ni** 'give' as first and foremost a 'case-marker', identifying the grammatical relation of indirect object for the 'receiver' of an utterance. Ex. 8) above is a point in case.

The verbs that are found in the corpus with **ni** 'give' are; **gan/geeŋ** 'say', **kpán/kpáán** 'tell', **ŋgweé** 'brag (?)' and **ráá** 'whisper'. They are all used of actually transferring new information to somebody, with the possible exception of **ŋgweé** 'brag (?)'. As part of chains with **ni** 'give' as final verb, they are somewhere in between a basic physical transfer of an object as shown in Figure 6-1 above, and clearly Benefactive events. The most comparable item is in fact **tíŋ** 'show', which also transfers information. Actually, though **tíŋ** 'show' basically denotes more or less visual transfer of information to an observer, it is also used of verbal transfer as i.e. teaching in the school.

The utterance verbs appearing with **ni** 'give' in chains are thus comparable to the 'demonstrate' type of Action correlating, but since they are of the verbal kind I propose 'communicate' as a possible name of this type.

In 52), one of these verbs appears, in a very frequently used chain:

52)	S ^{em}	V ¹	V ²	O ^{recp}	cm	
	Năm	gan	ni	mbêw	à	...
	Năm	gan	ni	mbêw-L	à	....
	hyena	say	give	monkey-df	said	...

"The hyena said to the monkey that..."
txt2:006

We take 52) to evince Action correlating with **ni** 'give' as framing event. The Agency's action of listening or being attentive is fixed. It is different from, but logically related to the Agent's action of speaking, and so the 'communication' type of Action correlating is used to formalize the interrelatedness of the actions of the two participants.

Formal version: [the Agent PUT his Action IN-COMMUNICATION-TO Agency's LISTENING] CONSTITUTED-BY [Agent said]

Benefactive events with ni 'give'

The last group of chains with **ni** 'give' have a following indirect object with Benefactive role. The V¹ verbs of these chains can generally be said to refer to the event that the object benefits from. We regard these chains as also having an Action correlating framing event expressed in **ni** 'give' as V² verb. Let us examine some such chains from the viewpoint of Action correlating.

The first chain is taken from a clause where a person asks another to help him by brewing beer for the people he wants to get to work in his fields on a day of **súrgā** 'organized communal fieldwork'.

53)	cm	V ¹	V ²	O ^{ben}	O ^{pat}	
	... à	déŋw	nī	yì	mvúú	ďáñì ...
	.... à	déŋw	ni-L	yì	mvúú	ďáñì ...
	... said	brew	give-imp	log	beer	cultivation-df ...

"...saying Brew me the beer of cultivation!..."
s38:003

The Agent of 53) is not overtly expressed, since it is an imperative directed to an addressee. The second Agency is here the asker himself, the person who will benefit from the action of the Agent. His role may be conceptualised as a taking possession or control of the other's action.

By using a chain with **ni** 'give', the relation conceptualized as existing between the actions of the two participants is overtly expressed. The action of the Agent constitutes the content of the Agency's action of taking possession or control. Again we have to propose a new type of correlation to account for this Nizaa conceptualization of interrelated events, namely 'availability'

In actual fact, of course, the Agency's receiving of such a Benefactive event may consist of a number of actions; with this particular chain we may imagine acts such as supplying ingredients for the beer,

moving the finished product to the field, doling it out to his workers etc. But such specific actions will change from verb to verb and context by context, and is irrelevant compared to the basic notion of being in control or possession of the action carried out by another person. Thus, being at the receiving end of activities carried out for one's benefit is a 'fixed' activity compared to the variety of actions eligible for the Agent's performance.

Formal version: [the Agent PUT his Action TO-AVAILABILITY-OF the Agency's CONTROLLING] CONSTITUTED-BY [the Agent brews beer]

Ex. 53) happens to be an imperative chain, but this must not trap us into thinking that it is the imperative that marks the conceptual relationship between the actions of the Agent and the second Agency. The same correlation is found in declarative clauses with **ni** 'give' chains. The clause below is the continuation of the clause in 53):

54) **S^{ag}** **aux** **O^{ben}** **O^{pat}** **V¹** **V²**
 **nitaŋw̃** **à** **kùú** **juú** **fúm-kí** **nì.**
 nitaŋw̃ à kùú juú-L fúm-kí nì.
 ind.pron-pl aux grandpa weeds-df cut-TOT give.

“....., people will clear out the juu-weeds for him.
 s38:003

In this subordinated clause, the verbal complex is sentence-final, while the indirect and direct objects are transposed to a position in front of the verbs. Notably, they stick to their relative position: indirect object with Benefactive role before direct object with Patient role.

The same correlation of an Agent making his action available for a second Agency taking control of it is found here. The Agent this time is an indefinite group of 'people', the persons Grandpa are organizing to get his field cleared.

Formal version: [the Agents PUT their Actions TO-AVAILABILITY-OF the Agency's CONTROLLING] CONSTITUTED-BY [the Agents cut weeds]

6.4.3 Other Action correlating verbs

Two more verbs seem to have an Action correlating effect as final verb of chains: **yee** 'change' and **too/tow** 'follow'. Together with **sweɛŋ** 'ask', they are to a certain extent complementary activities in dialogue situation. We shall first treat **yee** 'change' and **sweɛŋ** 'ask', then **too/tow** 'follow', before examining a last chain with **yee** 'change' in a somewhat different context.

yee 'change' is a fairly polysemous verb, but its basic meaning seems to be 'change location'. In dialogues it is often used to refer to one participant's answering the other, the 'change of location' is extended by the idea of 'change of the speaking locus' to mean 'answer'. A dialogue scene with questions and answers is clearly coactive. We have one such chain in our corpus.

- 55) PP V¹ V²
 ... wú wân nyin yεεkirē.
 ... wú wân nyin yεε-ki-rē
 ... with chief speak change-TOT-v.detr

“.... to exchange speeches with the chief.”
 txt5:007

Ex 55) is the purpose-clause continuation of a sentence cited as ex 7), of villagers taking two visitors to their chief. The ensuing dialogue session is by 55) not conceptualized as involving the ‘giving’ of information to a receiver, but as to talk in answering the chief. This is seen in the use **yεε** ‘change’ as V² –verb rather than **ni** ‘give’. The V¹ –verb **nyin** ‘talk’ occurs elsewhere with **ni** ‘give’, and so it is not this verbs that demands the presence of **yεε** ‘change’. Instead this chain is another example of how a conceptualization of a complex event may govern the choice of verbs. By the choice of verbs, it also governs the choice of grammatical relations: Though other utterance verbs in chains take an indirect object with Recipient role, there is no such object here. Instead the dialogue partner is expressed in the oblique prepositional phrase **wú wân** ‘with the chief’, the preposition expressing comitative. Still, this PP represents the second Agency of the Action correlating scene, as in the comparable English sentence *I talked with him*, which normally will be interpreted as having both participants engaged in talking.

As **sweεŋ** ‘ask’, **yεε** ‘change’ pertain to the dialogue situation. As we remember, **sweεŋ** ‘ask’ did not co-occur with **ni** ‘give’ either. A dialogue situation of this kind thus seems to be conceptualized as different from the ‘communicating and listening’ situation we treated above. We will propose ‘response’ as a relevant type of Action correlating here, as an action that is complementary to ‘asking’.

Formal version: [the Agents PUT their Action IN-RESPONSE-TO the Agency’s ASKING]
 CONSTITUTED-BY [the Agents spoke]

sweεŋ ‘ask’ on the other hand, though occurring 6 times in simplexes, occurs only once in a chain and then as V¹ –verb. It thus conflates within itself both the notion of being in a dialogue situation with a partner and of speaking in a certain mode (i.e. to ask for information), and so does not need an extra utterance verb to act as co-event in the dialogue situation.

The chain in which **sweεŋ** ‘ask’ occurs in co-event position is interesting, though. It is presented in 56).

56) S^{em}	V¹	V²	O :ReIS [V¹]
Fám ðùù swɛɛɲ towwu yɛɲw pínwúnâ.			
Fám ðùù swɛɛɲ tow-wu yɛɲw pínwúnâ.			
uncle hare ask follow-pst thing do-pst-pcpl			

“Uncle Hare asked what exactly had happened.”
txt2:013

The relative clause of 56), **yɛɲw pínwúnâ** ‘thing done’, refers to events that had taken place before the speaker’s entering on the scene. He therefore wants to know what has lead to the present state of affairs (a pitched battle between the two other participants present). The chain used to express his asking employs **swɛɛɲ** ‘ask’ in co-event position and then has the verb **tow** ‘follow’ in framing event position. In V² position **tow** ‘follow’ may also be used with other utterance verbs like **kpáɲ /kpááɲ** ‘tell’, and then denotes a telling which renders a course of events chronologically. Postulating a similar meaning for its use here, it depicts the asking as being carried out with several questions along the lines of: What happened first? And then? And then?

Such repeated asking could of course be taken at face value, as a Temporal contouring event. But the meaning of **tow** ‘follow’ also opens for a coactivity reading, since ‘follow’ intrinsically points to some other entity moving as well. In this setting, however, it denotes neither a following in space nor a “following” in time, but rather a “following” of the events of a sequential narrative. We accordingly take it to belong to the dialogue situation, where the ‘follow-up questions’ of the Agent unravel a story from the Agency’s telling. The Action correlating type of ‘response’ for the Agency’s action fits well with the present use with **swɛɛɲ** ‘ask’ here, but is less apt with the counterpart use with **kpáɲ /kpááɲ** ‘tell’. We consequently propose ‘follow’ as type, and let the co-event be decided by the nature of the Agency’s action as ground entity.

Formal version: [the Agent PUT his Action IN-FOLLOWING-OF Agency’s ANSWERING] CONSTITUTED-BY [the Agent asks]

We undertake to analyse a last chain with **yɛɛ** ‘change’ before leaving Action correlating. The subject of the clause is elliptical, but it probably has a patientive role in the context (cfr the preceding sentence in ex 11) above).

57) V¹	V²	ADVL	sbn	S^{ag}	V¹	cm
Yeg yɛɛkiri wú cwáá lō,				nǎm kpááɲná à ...		
yeg yɛɛ-ki-ri wú cwáá lō				nǎm-L kpááɲ-ná ǎ ...		
separate change-TOT-PF with death since hyenaDF talk -past CIT						

“Then having been separated with death, the hyena spoke saying...”
txt2:010

This example is at first sight built on the same structure as 55) above, i.e. $V^1 - V^2$ [yεε] - PP [wú +N] (only inverted in 55), since it was a subordinated sentence governed by a ‘modal’ construction). But do we have an Action correlating event here? Some differences with 55) are as striking as the similarities: V^1 is not an utterance verb, it denotes the separation of two entities, and it is therefore rather a motion or a state change verb. The noun of the PP, ‘death’, is not animate, though the comitative **wú** preposition is used. The effect of the two verbs are ablative, with the subject “moving” away from death as the ground entity. And the subject is not clearly agentive, making it difficult to use the formalism introduced by Talmy for this framing event.

One possibility is to classify this chain as having a State change framing event, thus expressing a ‘change from a state of immediate danger of dying’ to a ‘state of considerably less immediate danger of dying’.

However, the clause intuitively is similar to coactivity, inviting such free translations as “Escaped from his brush with death,” We propose therefore that this is a metaphorical use of the Action correlating schema, mapping animacy, or capability of intentional action, over from the second Agency in Action correlating instances, to the second ‘Agency’ here, thus personifying the concept of death to some degree. The subject has ‘responded’ to Death by fleeing, or more precisely, by acting so as to be removed from it. The formal version given below is built on these ideas of a metaphorical mapping from change of state, to an Action correlating reading.

Formal version: [the Agent PUT his action IN-RESPONSE-TO the Agency’s MALEVOLENT PRESENCE] CONSTITUTED-BY [the Agent “moved away”]

6.4.4 Summary of Action correlating as framing event

We have found 20 instances with Action correlating as framing event in the corpus.⁵⁹ Different situations with an inherent coactivity were found to express this linguistically by means of V^2 -verbs denoting comitative and dative, thus framing the events as Action correlating. The framing verbs discussed were **yááj** ‘be.together’, **ni** ‘give’, **too/tow** ‘follow’ and **yεε** ‘change’. In the context of the dialogue situation **sweej** ‘ask’ was also discussed.

The notion from Talmy of verb-framed languages as possibly allowing only identical activities in an Action correlating set-up, was shown to be incorrect for Nizaa. Nizaa seem to allow an even higher degree of difference between the correlated events than Talmy’s sample of languages.

Table B –4 in the appendix B shows all the chains found to have an Action correlating event in the corpus.

6.5 Realization

Finally approaching the last type of framing event and thereby the end of our analysis of the 2-verb chains, we shall as usual start with a presentation of the framing event (Talmy 2000-II: 261- 278).

Like State change, Temporal contouring and Action correlating, **Realization** as framing event is perceived as a metaphorical extension of Motion. We shall return to the exact analogy with Motion below after presenting the important concepts of **fulfilled** and **conative** verbs. These categories are illustrated with English examples, and the Realisation event is thus expressed mainly in satellites. Realization encompasses the two subtypes **fulfillment** and **confirmation**.

In demonstration of Realization as framing event, Talmy groups the (agentive) co-event verbs into four different lexicalisation patterns along a scale of increasing inclusion of referential material. Common to all four groups is the fact that they represent a particular action performed by the Agent, and that the scope of the Agent's intention extends at least over the performance of this action (Talmy 2000-II: 261-263).

In the first verbal pattern, **intrinsic-fulfillment verbs**, the scope of intention is coextensive with the action, and the action thus constitutes the verb's reference alone. A further event may be present, as a state change resulting from that action, and this group thus can be equally well seen as a co-event of Cause to a state-change frame (Talmy 2000-II: 264). An example given is *I kicked the hubcap* as compared to: *'I kicked the hubcap flat.'*

As far as Realisation is concerned, the Agent's intention is 'to propel foot into impact with (some object)' and this is borne out. The further event of causing the object to have a certain shape is not contained or intended in the verb. It is expressed in a 'further-event satellite' as a result of the kicking action.

The second group consists of **moot-fulfillment verbs**. Here the scope of intention extends beyond the action to a goal. Whether or not this goal is actually attained is a question left moot by the verb, and so can be specified by the framing event of fulfillment. As an example of a verb where the scope of intention extends to include the goal, *hunt* is used: 'go about looking with the goal of thereby finding and capturing'. Consider *'The police hunted the fugitive for three days/ *in three days (but they didn't catch him)'* as compared to: *The police hunted the fugitive down in five days/ *for five days (*but they didn't catch him)*. When the framing event of realization is present (here expressed in the satellite 'down'), the attaining of the goal can be seen as fulfilled. Such a satellite is labelled a 'fulfillment satellite'.

The third group of verbal lexicalisation patterns extends the scope of intention even further, to include an implicature of the fulfillment of a goal. With these **implied-fulfillment verbs**, the framing event of realisation accordingly shifts to the 'confirmation' subtype. E.g. the event of *wash* ('immerse and agitate with the goal of cleansing thereby + the implicature of attaining that goal') still

has the possibility to be denied by a ‘but’-clause, but with the inclusion of the satellite *clean* this becomes impossible. Compare the simplex sentence *I washed the shirt (but it came out dirty)* to the complex with realization satellite in: *I washed the shirt clean (*but it came out dirty).* The inclusion of a confirming realization frame thus precludes the denial of the implicature. The satellite may be called a ‘confirmation’ satellite.

The last group is **attained-fulfillment verbs**, verbs lexicalised to include ‘action + goal + fulfillment of that goal’, in their reference. In English, *drown* is an example of this lexicalisation pattern, indicating that an Agent intentionally executes the action of submerging an animate entity in liquid, that the Agent further intends this action to lead to the death of the animate entity, and that this actually takes place. An addition of a denial, or another confirming or fulfilling satellite is not allowed: *I drowned him (*but he wasn’t dead)* or: **I drowned him dead/to death* is equally impossible.

The referent of such a verb is to be understood as semantically complex, consisting of two qualitatively distinct subevents, one of which is earlier than the other and intended to cause it. But it is not clear that such a verb can be systematically distinguished from the intrinsic-fulfillment verbs of group one; the difference is more a question of how fine-grained the conceptualization is. The two groups share a common factor: their scope of intention matches their extent of fulfillment, and so the single term **fulfilled verb** is introduced to refer to both types.

The same argument is made for moot-fulfillment and implied-fulfillment verbs: they differ as to their implicatedness of fulfillment, but have in common the fact that their scope of intention overshoots their extent of fulfillment. It is possible to refer to these two groups by the single term of **conative verbs** (Talmy 2000-II: 268). The role of the framing event is then to supply the event of fulfillment or confirmation of the co-event. The group of fulfilled verbs on the other hand will not so easily be supplied with Realization satellites, since their scope of intention is co-extensive with their reference. A possible satellite will either refer to a further event or be pleonastic.

As before, the Realization framing event is said to take the form of a satellite in typologically satellite-framed languages, and be expressed in the main verb in verb-framed languages. The analogy with Motion framing event runs thus: As the space domain has motion from elsewhere to a particular location, and as the state domain has change from the absence of to the presence of a particular property, so the realization domain has transition from a potential stage to an actualized stage of realization, or from an assumed degree to a definite degree of realization. This provides a Path analogy. The co-event is treated as a substrate shaped by the fulfillment or the confirmation event.

Talmy does not clearly specify the figural entity, and this poses a problem in the understanding of Realization. Based on the treatment of the other framing events, the schematizations cited below and the Path analogy given above, we conjecture that the figural entity is either the ‘intention’ or that it is the ‘implicature of the intention’ to cause some event. The intention or the

implicature “moves” from being potentially realized to being actually realized, i.e. respectively fulfilled or confirmed. This may work well with agentive sentences, but in cases where there is no Agent to instigate a causal chain of events, it is less obvious. We propose here that an assumed degree of Realization “moves” to a definite degree or to its implied end-point.

Talmy provides two schematizations of Realization, for the fulfillment and confirmation subtype respectively. They are more complex than the schematizations we have reviewed hitherto, bringing intentions into the schemas, but otherwise built on the same template of: [Framing event] SUPPORT RELATION [Co-event].

58) Realization schemas

- a. [Agent “_AMOVE” TO FULFILLMENT the INTENTION (to CAUSE X)] WITH-THE-SUBSTRATE-OF [Agent ACT + INTEND to CAUSE X THEREBY]
- b. [Agent “_AMOVE” TO CONFIRMATION the IMPLICATURE of the FULFILLMENT of the INTENTION [to CAUSE X)] WITH-THE-SUBSTRATE-OF [Agent ACT + INTEND to CAUSE X THEREBY + IMPLICATURE of the FULFILLMENT of the INTENTION to CAUSE X]

Now languages differ not only on the point of being verb-framed or satellite-framed, but also on whether verbs generally are lexicalized as conative or fulfilled. Mandarin is cited as example of a satellite-framed language with implied-fulfillment or moot-fulfilled reference of the verbs, and thus regularly requires additional satellites to upgrade such references to that of attained fulfillment. English on the other hand, though also satellite-framed, has verbs characteristically lexicalized to refer to attained- or intrinsic-fulfillment events, and so take additional satellites to cut back on this original reference. One such ‘resection’ strategy is the employment of *at* with intrinsically fulfilled verbs like *kick* or *grasp*. The effect of the combination *kick at* / *grasp at* is to leave moot the outcome of the actions performed – the actions were taken, but the actual ‘coming into contact with some object’ which is normally a part of the reference of these two verbs, is not ascertained.⁶⁰

Nizaa is verb-framed, but are the verbs generally conative or fulfilled? From the small number of chains with a Realization framing event in the corpus, it seems that it is closer to English in this respect. Of course there is a number of chains with **ba** ‘finish’ which might have been assigned to this framing event, since they can be seen to denote the fulfillment of a process on the figural entity. But these we have already classified as having a Temporal contouring framing event, with a possible placement also with State change. Apart from these chains, there are only a few occurrences of Realization. Furthermore, the group does not present a very coherent picture of the framing event in the form of one or a few verbs used several times in the same way, as we have seen before with other framing events. This may be due to Realization event being specifically related to the meaning of the

co-event (as i.e. *clean* is related to *wash*), instead of having a meaning unrelated to the co-event, only marking the confirmation or the fulfillment as events per se (Talmy 2000-II: 266). We have chosen 3 to present here, out of 5 chains with this framing event. A fourth 2-verb chain is dealt with in the context of 3-verb chains, cfr 7.2.3.2.

The first example is very close to a Motion event, and it employs in V² position a familiar framing verb.⁶¹

- 59) **S^{ag}** **V¹** **O^{pat}** **V¹** **V²**
 ...nìlāw reŋwki ŋu nùùŋ ɓúúŋ jɪŋkirē.
 ...nì-lāw reŋw-ki ŋwi nùùŋ ɓúúŋ jɪŋ -ki-rē
 ...person-Dm arrange-TOT 3s mouth diminish return-TOT-v-detr

“.... he “worked” his mouth and closed it up again.”
 txt5:032

Opening and closing one’s mouth may clearly be seen as Motion events. But to speak of closing the mouth ‘again’ is hardly a moving back to a previous location, rather one might think that ‘again’ takes on an aspectual meaning, something that is done again, as we have seen before with this particular V² verb. But aspect also has its limits in this respect, since the act of closing one’s mouth is such an extremely frequent operation, perhaps so frequent as to make unnecessary an aspectual marking with ‘do.again’. We therefore believe Realization to be the relevant framing event here, denoting this particular closing of the mouth as something of a feat on this particular occasion.

In so doing we postulate a ‘implied-fulfillment’ rather than an ‘attained-fulfillment’ reading of ɓúúŋ, understanding it to denote ‘diminish’ rather than ‘close’. That such a reading is possible with this verb, is seen in a sentence from another story where it is used in the subjunctive with **yer** ‘begin’ as modal verb:

- 60) **S^{ag}** **V^{1-mod}** **V^{1-sub}**
 ... kùú nùùŋ yerarí ɓúúŋwā,
 ... kùú nùùŋ yer-a-rí ɓúúŋ-wā,
 ... grandpa mouth begin-into-PFtr close-sub.

“...grandfather's mouth started diminishing..”
 s42:002

The context tells us that 60) is not strictly a matter of grandpa’s actual closing of his mouth, rather it is used of his calming down and speaking in a quieter way. In any case, ɓúúŋ is conceptualized as a process rather than a punctual event, with the outcome of ‘being closed’ as a possible, but not necessary, part of its meaning.

In the case of the chain in 59) we are left with two choices for accommodating Realization as a fulfillment framing event. We can either see the V¹ verb ɓúúŋ as denoting ‘diminish’ and the V² verb

as a further-event fulfillment of the diminishing action of V¹. Or we can see the V¹ verb as denoting ‘close (process + implied-fulfillment)’ and the V² verb as a confirmation of the implication. As there is no native speakers of Nizaa around to ask, we are unfortunately forced to leave it at that. We may only propose a possible reading for the formal version along the lines of the a. alternative of 58) above:

Formal version (59): [Agent “_AMOVE” TO FULFILLMENT the INTENTION (to CAUSE closing of mouth)] WITH-THE-SUBSTRATE-OF [Agent was closing his mouth]

The next chain has a V¹ verb with a moot-fulfillment denotation: **múúŋ** ‘disappear’, which clearly can be considered a process (‘dwindling into the distance’). Again the chain is close to, or may even be said to be, a Motion event. Still the clause ascertains that the subject completely disappeared, and we take this to be the effect of a framing event of Realization expressed in the final verb.

61)	S ^{pat}		V ¹	V ²	adv
	... kòmcún	lâw	múúŋ	ran-áwa	gúúŋninā.
	... kòm-cún	lâw	múúŋ	ran-a -wa	guuŋni-nā
	... tree.sp.-big	Dm	disappear	be.lost-into-from	sky-in

“..., that big kom-tree vanished away into the sky.”
txt5:029

In 61) **múúŋ** ‘disappear’ is followed by **ran** ‘be.lost’. The V² verb frames the event of ‘disappearing’ by confirming the fulfillment of its end-point: the entity in question has vanished from sight (by moving away). The subject of the chain is patientive, and as such cannot be said to have intentions. The V¹ verb can still be considered to have a scope of ‘intention’ that goes beyond the event to an implied end-point, and the V² verb to have a scope of ‘intention’ that is coextensive with the event and its end-point. The formal version tries to capture these considerations, using the implicature of fulfillment as figural entity.

Formal version: [the IMPLICATURE of the FULFILLMENT of the END-POINT (for the Patient to be lost from sight) “MOVED” TO CONFIRMATION] WITH-THE-SUBSTRATE-OF [the Patient disappeared]

Our last example of this framing event is presented in 62):

62)	S ^{pat}	V ¹	V ²	Loc
	... cam lærī-L	sáó	tamakírí	ḡágrinā
	... cam lærī-L	sáó	tam-a-kí-rí	ḡágrī-nā
	... finger 6 th -df	entangle	be.solid-into-TOT-PFtr	clothes-in

“ ..., his 6th finger⁶² got solidly caught in his clothes,... “
s43:003

Again the subject is patientive, and there is consequently no question of an intention of ‘getting caught’. The V¹ verb is glossed as ‘entangle’ (French: être pris par les pieds), which points to an event of being involuntarily entangled in/by something. In our chain this is used of a finger getting entangled in clothing. This is taken a step further by the V² verb, which is a verb often used of attaining a state of hardness, strongness and general solidity. We take this verb to express the framing event of Realization in this chain, specifying the act of entangling as ‘getting inextricably caught’.⁶³

Once more it is difficult to know the exact scope of intention lexicalized by the verbs of the chain. We propose **sáá** ‘entangle’ to be moot-fulfilled on the question of the entanglement being extricable or inextricable. On the other hand **tam/tajw** ‘be.solid’ can with a reasonable amount of certainty be claimed to be an attained-fulfillment verb. In our context of patientive usage, this means that it lexicalizes the event itself as an actual and fulfilled fact with an attained end-point.

Formal version: [the IMPLICATURE of the FULFILLMENT of the END-POINT (for the Patient to be inextricably caught) “MOVED” TO CONFIRMATION] WITH-THE-SUBSTRATE-OF [the Patient entangled itself in clothing]

6.5.1 Summary of Realization as framing event

We have found only 5 chains with Realization as framing event, 3 of them are discussed here. The ‘scope of intention’ of the V¹- verb was found to be important for assigning a Realization framing event to the chains treated. Due to the small size of the corpus and the lack of informants, the results were to some extent tentative. It may also simply be a result of Nizaa verbs generally lexicalizing attained fulfillment and so disallowing Realization elements in the verb complex, behaving like English in this respect.

Table B –5 of Appendix B show all the chains assigned to the framing event of Realization in the corpus.

6.6 Summary of two-verb chains

When summing up the total analysis of the 2-verbs chains, some results are especially salient. First, there is good reason to assume that chains do express conceptually integrated events, that they are macro-events in the sense developed in chapter 4, as proposed in **Hypothesis 1**. Secondly, we have shown that there is a structured relation between the sub-events of the macro-event, by means of the types of framing events and co-events proposed by Talmy on a cross-linguistic basis.

The framing event of a complex macro-event is expressed in the final verb of the chain, while the co-event is expressed in the first verb, as proposed in **Hypothesis 3** and **Hypothesis 4**. This pattern was recurrent with all the 5 types of framing event.

Most of the co-events proposed by Talmy were also found to be useful for the analysis of Nizaa verb chains. Exceptions were Concurrent result, with no instances, and Precursion with only 2 occurrences in one framing event type (State change). Constitutiveness was on the other end of the frequency scale as the only framing event of Action correlating and Realization, and the most prevalent one of Temporal contouring. With Motion and State change, Cause proved to be the most frequent co-event, with Manner trailing a little behind. Subsequence and Constitutiveness are also numerous with these types of framing event.

Pleonastic expressions of framing events also occur, this was most clearly seen with the framing event of Motion (11 chains of 43 totally). 7 of these chains had **jij/juuj** ‘return’ as final verb. **jij/juuj** ‘return’ was found to be special in other ways as well: it occurs in three different types of framing event, it is never used in simplexes, and the only occurrence as V¹-verb is with locative **ni** ‘give’, itself the second-most frequent verb in final position. These facts clearly invite some deeper considerations, but for the present purposes of summing up chapter 6, we shall only propose that in the cases of **ge juuj** ‘go-return’ and **juuj ni** ‘return-give’, a lexicalizing process may already have taken place so that they function more as single lexical items. Pleonastic expressions are in our view prime candidates for lexicalizing as single items and subsequently take on more idiomatic meanings.

We have also several times noted a correspondence in meaning between the V¹-verb and the derivational suffixes of the V²-verb. This also points to compounding, that is, not only to a strong semantic integration of the events of the chains, but to a morphological compounding, since the derivations modify the whole chain as one item instead of modifying just their immediate host.

The next step will be to examine the 3 and 4- verb chains of Nizaa.

7 ANALYSIS OF 3-AND 4- VERB CHAINS

Though far less frequent, 3- and 4-verb chains are very much a part of Nizaa sentence structure. In the present chapter we will show how these chains are built up, starting with distributional patterns and going on to treat the 3-verb and 4-verb-chains according to type of framing event.

7.1 Frequencies and distribution patterns

There are sixteen 3-verb and three 4-verb chains in the corpus. We refer to 3.2 for frequency tables of 3- and 4- verb chains.

The 3-verb chains present some verbs and verb groups already well-known in final position. The 4-verb chains being only 3, the number of verbs in them may seem surprising at first sight, but it is simply due to the fact that 3 times 4 verbs is 12. With such a small collection of 4-verb chains it is also unsurprising that none of the verbs occur more than once in these chains.

7.1.1 Distribution Patterns in 3- and 4-verb chains

The distribution patterns of these longer chains turn out to be slightly different from the 2-verb chains. We have collapsed the distribution pattern numbers for 3- and 4-verb chains, since this gives a clearer picture of the general tendencies. Neither is there any column for the verbs following or proceeding each verb. We first list the verbs with mainly final distribution, then middle position verbs (V^2 and V^3 positions are collapsed for the 4-verb chains), and first position verbs, with some comments comparing them to the 2-verb distribution patterns. Finally note is taken of one verb of mixed distribution.

Figure 7-1 Final verbs

<i>Verb</i>	<i>Meaning</i>	<i>3 / 4 chains</i>	<i>First</i>	<i>Middle</i>	<i>Final</i>	<i>Simplex use</i>
jín/juun	return; redo	9		1	8	*
ni	give	4			4	2
se	see	1			1	2
jib/jiw	roam	2			2	*
ḡeḡ	rescue	1			1	E
taa	disperse	1			1	1
déb	be.in.crowd	1			1	*
ba	finish	1			1	1
tam	be.solid	1			1	1

Some of these verbs are so rarely found in the corpus that their distribution patterns do not tell us much, others we have already treated at length when working on the 2-verb chains. We notice

jin/juun ‘return’, **ni** ‘give’, **tam** ‘be.solid’ and **ba** ‘finish’ among the last group. Once again **jin/juun** ‘return’ occur with **ni** ‘give’ as last verb.

When passing over to the verbs with middle position in these longer chains, we find verbs from both the final verb group and from the mixed distribution group of 3.3. Again there are some with only this occurrence in the corpus.

Figure 7-2 Middle position verbs

<i>Verb</i>	<i>Meaning</i>	<i>3 / 4 chains</i>	<i>First</i>	<i>Middle</i>	<i>Final</i>	<i>Simplex use</i>
dib/diw	exit	3		3		1
kwanw	ascend	2		2		*
yee	change.location	2		2		*
tan/taan	eat	1		1		
yaan	be.together	1		1		E
kwee	find	1		1		3
mgbee	arrive	1		1		1
nyin	speak	1		1		1
shiw	be.strong	1		1		*
da	stand.legs.apart	1		1		*

yee ‘change’, **yaan** ‘be.together’, **kwanw** ‘ascend’, **kwee** ‘find’, **mgbee** ‘arrive’ and **nyin** ‘speak’ we have met as final verbs before, but in the context of longer chains they are in middle positions. **dib/diw** ‘exit’ has a typical mixed distribution in 2-verb chains, and ends up in the middle here. **yuu** ‘rise’ on the other hand, had one occurrence as a V¹ –verb in 2-verb chains, here it has two in middle and one in first position.

The group with a V¹ position here are largely V¹ –verbs in 2-verb chains as well, or has no occurrence elsewhere at all.

Figure 7-3 First position verbs

<i>Verb</i>	<i>Meaning</i>	<i>3 / 4 chains</i>	<i>First</i>	<i>Middle</i>	<i>Final</i>	<i>Simplex use</i>
loo	run	3	3			E
ka	take	2	2			2
du	advance	2	2			1
viin	be.angry	1	1			E
pan	carry	1	1			E
bur	cut.open	1	1			E
goo	chop	1	1			1
ten	sever	1	1			E
nyin/nyiin	stand	1	1			2
baa	seek	1	1			3

The last group is the verbs of mixed distribution, and here there are only two members. **ge** ‘go’ was the most frequent of the mixed distribution verbs of 3.3, and appears here as well, as would be expected. But only first and middle positions are recorded, no final positions. The second verb **yuu/yi**

‘rise;work’ had in the 2-verb chains only one occurrence, as V^1 , but has a more mixed distribution here.

Figure 7-4 Mixed distribution

Verb	Meaning	3 / 4 chains	First	Middle	Final	Simplex use
ge	go; part	5	3	2		14
yáá/yí	rise; work	3	1	2		2

7.2 Three-verb chains

Moving over now to an analysis of these longer chains we use the same framework as before, and more specifically, we expect to find the same main structure of the chains as we have found already with the 2-verb chains. This means a set-up of final-position framing event and a first-position co-event. But we must obviously decide how far forward in the chain the ‘final position’ stretches, and how far towards the end a ‘first-position’ goes. And the question of a possible ‘middle-event’ must be considered: do co-event and framing event cover all possible elements of a macro-event?

A first strategy of analysis make use of the notion of pleonastic expression of the framing event and the findings of chapter 6 as expressed in the summary (6.6).

63) *Pleonasms in 3-verb chains*

- V^2 and V^3 form a more or less lexicalised compound and are expressing the framing event together, with the V^1 verb as co-event
- $V^2 + V^3$ combinations are pleonastic expressions of the framing events.
- A pleonastic expression may also occur in co-event position and take a further ‘final verb’ as extension, making possible triple pleonastic expression of the framing event.

A second strategy groups V^1 and V^2 together, with two possible set-ups. One employs a notion of nesting within the macro-event, basically having an overall framing event expressed in the last verb, and a smaller-scope framing event from another domain in the second verb. The other set-up simply has two co-events in some 3-verb chains.

64) *Complex co-events in 3-verb chains*

- V^2 acts as the framing event [x] of V^1 , giving $[V^1 + V^2]x$, and V^3 acts as framing event [y] of $[V^1 + V^2]x$, giving $[[V^1 + V^2]x V^3]y$
- V^1 and V^2 is concomitantly framed by V^3 .

Motion is the most frequent framing event with 3-verb chains as well, with 11 out of 16 instances. Then Action correlating follows with 3 occurrences, before State change and Realization with 1 each. We start out by examining Motion chains.

7.2.1 Motion

In our first example we shall cite a 3-verb chain containing an already familiar combination (cfr 6.4.2).

65)	Sag	V ¹	V ²	V ³	O ^{pat}	Rel:[V1	]	O ^{pat}
	Dùù	ka	juuŋ	ni	ndushò	sɛɛkiwuré		mum, ...
	Dùù	ka	juuŋ	ni	ndushò	sɛɛ-ki-wu-ré		mum,
	hare	take	return	give	eggplant	ripe-TOT-stat-v.detr		one

“Hare brought back one ripened eggplant,”
txt7:011

In 65) the use of **ni** ‘give’ is purely locative, governed by **juuŋ** ‘return’ in this respect, though no locative NP is present. In any case the context tells us that the agent has no intention of actually giving the eggplant to anybody. The chain thus says that one object was taken by the subject and moved back to his previous location as specified by **juuŋ** ‘return’, and that this movement was directed to a Goal. With this pleonastic Motion event a Cause co-event is used, transitivity the sentence in the same way as in ex 7) above.

Formal version: [The Agent _AMOVED the Figure TO a previous location] WITH-THE-CAUSE-OF [the Agent took the Figure]

We find the same pattern in the next example.

66)	S ^{ag}	V ¹	V ²	V ³	O ^{pat}	Loc
	Móówu	pan	ge	juuŋwú	kùù	póm.
	Móó-wu	pan	ge	juuŋ-wú	kùù	póm.
	indf.-pl	carry	go	return-pst	grandpa	village

“They carried grandfather back to his village.”
s43:004

In this 3-verb chain, the pleonastic 2-verb chain **ge juuŋ** ‘go back’ has been augmented with a another verb than in the preceding example, but with the same effect of getting a transitive verbal complex and having a Cause co-event.

Formal version: [the Agents _AMOVED the Figure to a previous location] WITH-THE-CAUSE-OF [they carried him]

This same pattern of a V¹ –verb with co-event support relation to a pleonastically expressed Motion event we see in several of the 16 three-verb chains. The table below indicates this relationship by putting V¹ into the first column and V² and V³ together into the second. (The full sentences may be seen in Appendix B, Table B –6)

Table 7-1 2-verb framing events

	<i>Co-event</i>	<i>Framing event</i>	<i>Free translation</i>
1)	kí cut (?)	yí jín (wú fààŋ) rise return (with back)	stopped short and returned (at full speed)
2)	lóó run	yúú jín (wú fààŋ.) rise return (with back)	turned back and ran (at full speed)
3)	loo run	mgbee jínáwawu (póm) arrive return-into-pst village	arrived running back into town
4)	viin be.angry	dib juunrē exit return-v.detr.	angrily exited again
5)	bur cut.open	dib jùàŋ exit return-TAM	cut open and get out again
6)	gē go	yē jíwcfíre change circle-TAM-v.detr	go roaming about

Tellingly, the majority of these chains has **jín/juun** ‘return’ as the V³ –verb. Chains 1) and 2) has **yí/yúú** ‘rise’ in V² position, this is a motion verb often introducing a Motion event with a sort of ‘onset’ effect (cfr ex 4) above, and Table B-1 in Appendix B). Chain 3) has **mgbee** ‘arrive’ in V² position, and chains 4) and 5) has **dib/diw** ‘exit’, both well known ordinary motion verbs with simplex use as well. The last chain has **jíb/jíw** ‘roam, move hither and thither’ in V³ position, it is a verb that happens not to occur in the 2-verb chains, but which is otherwise well-known outside our corpus. It has **yē** ‘change.location’ as V² –verb, and the two together place the chain solidly as a Motion event with double expression.

Turning to the co-event verbs, we find chain 2) and 3) with **loo** ‘run’ as a Manner co-event. Chain 5) **bur** ‘cut.open.’ is again Cause. Chain 1) we must leave without a final decision on the support relation of co-event, since the exact meaning is not known, though its meaning in this chain is certain enough (cfr free translation); Manner is the most likely option. Chain 4) with **viin** ‘be angry’ has a Concomitance relation with the framing event.

Finally chain 6) seems to express Motion in all 3 verbs, and as such be triply pleonastic. It is here somewhat symptomatic that the V¹ verb is **ge** ‘go’: it is by far the most versatile verb in the context of chains, with almost equal distribution as V¹ and V² in 2-verb chains, or V¹ and V^{mid} in the longer chains, it has a large number of simplex occurrences, and finally it is used in ‘modal construction’ in much the same way as English ‘go to do something’.

Some further comments must be made on the next chain, presented in a similar table below, but putting the dividing line between V¹ + V² and V³.

Table 7-2 2-verb co-events

<i>Co-event</i>	<i>Framing event</i>	<i>Free translation</i>
dú kwanw advance ascend	juən (cún 6irâ.) return (tree top-on)	go up into the tree again

The reason for dividing this chain so that the co-event slot contains the two first verbs instead of just one, is the fact that we have no occurrences of **kwanw** ‘ascend’ neither in V¹ position nor in simplexes. We simply do not know if it may occur as V¹ –verb followed by **jin/juən** ‘return’. We do have another occurrence of the same sequence first in a 4-verb chain, though. It is not unlikely that **kwanw** ‘ascend’ must always have some other verb in V¹ position to itself. On the other hand **jin/juən** ‘return’ is highly frequent as V² –verb with a number of different verbs, and therefore may well be eligible for a further final position also in this case. The effect is the same as with the 6th chain above: Motion event with triple pleonastic expression.⁶⁴

Two more Motion event chains merit some further comments. The first contains the familiar verbs **ge** and **juən**, but has another verb inserted between them.

67) V¹ V² V³ O^{pat}
 Ge kwεε juən ηu mǎǎη ...
 Ge kwεε juən ηu mǎǎη
 go find return 3sg friend

“(He) went and found again his friend, ...”
 txt4:017

Here the problem of deciding the status of the V² –verb becomes acute. Several interpretations exists. First the possibility of a modal verb **ge** ‘go’ with a purpose clause **kwεε juən** ‘find again’ must be refused: the sentence tells in straightforward declarative mode the fact that a person moved and found his friend. But does 67) mean that the subject ‘went back and found his friend’ or that he ‘went and found his friend again’? The first alternative is a clear Motion event with a further event of ‘finding’, the other is a Temporal contouring event with a Constitutive co-event of ‘finding’ and a further Cause or Enablement event of ‘going’. A third possibility is to emphasize **kwεε** ‘find’ as a change of cognitive state of the subject, with ‘going back, he found his friend’ as a possible paraphrase.

All three possibilities are neatly packaged in this 3-verb Nizaa chain as compared to the more cumbersome English expressions, and is a beautiful example of the process of backgrounding information in the verb complex that we discussed in 5.3. But it is difficult to settle on a final solution of how to analyse such a tripartite macro-event. Furthermore it shows that the chain structure of Nizaa is fairly open and that the proposed status of the chain **ge juən** as a lexicalised compound is accurate only to a certain degree.

As noted above, the V¹ verb **ge** ‘go’ is special. It combines ‘strong’ semantic content with high frequency in several different distributional contexts, and so is almost the inverse of **juun** ‘return’, which seem to have a somewhat bleached semantic content and high frequency of use in one specific distributional context.

Further complicating the matter is the fact that the subject does go to his previous whereabouts to find his friend. The sentence thus is clearly in the ‘in between-position’ that was put forward as ambiguous in the meaning chain of **juun** ‘return’, cfr 18) above.

Before deciding on a possible analysis, we need to discuss the V² –verb. A comparable chain with a motion V¹ verb was treated in 34) above. We then took ‘to find X’ to denote a change of cognitive state of the finder, with the motion event enabling this change by bringing the person to the location of the found entity. A similar view can be taken here, seeing V¹ + V² as chain with a State change framing event subsequently modified by V³ in a way similar to derivational suffixes. As we have noticed several times, they apply to the whole chain, often matching the meaning of the V¹ verb better than the meaning of the V² verb.

It seems that this last reading best can account for the facts. We venture to put forward a formal version with a Motion framing event and a complex co-event with a support relation of subsequence and a framing event of State change, in accordance with strategy proposed in 64)a).

Formal version: [the Agent _A MOVED TO a previous location] WITH-THE-SUBSEQUENCE-OF- [[he found his friend] ENABLED-BY [he went]]

The second chain to consider here has another sort of complex co-event.

68) S ^{ag} (rel:)	V ¹	V ²	V ³
Nàw ...	loo	déb	taakiré
Nàw	loo	déb	taα-ki-ré
people	run	have.diarrhoea	scatter-v.detr.

“The men... ran off in all directions with diarrhoea, ...
txt5:035

The clause may need a little contextual explanation: in this story a man styling himself as a person ‘who never gets enough of fighting’ is supposed to fight with 30 chosen men. His brother matches him as a person ‘who never gets satisfied with eating.’ After showing off himself, and a couple of truly astonishing feats of eating on the part of his brother, the fighter invites his opponents to get at it. Their reaction is described in 68) : they scatter in all directions at a run, and so frightened that they spontaneously defecate.⁶⁵ Yet again we may admire how unobtrusively all this information is conveyed by means of a chain, and wonder how it is structured.

In this case it is difficult to postulate a nested structure of complex macro-event within a larger macro-event. Rather the two first verbs describe two events happening together and framed jointly by the Motion event of the last verb. Once more we see a better semantic match between the V^1 –verb and the V^3 –verb (run –scatter), while the V^2 –verb provides a very different kind of event. The V^1 verb **loo** ‘run’ thus has a Manner support relation to **taa** ‘scatter’ while **déb** ‘have.diarrhoea’ have a Concomitance relation to both, as it were. We use the strategy of 64)b) to produce a formal version.

Formal version: [the Agents _AMOVED AWAY from a joint location] WITH-THE MANNER-OF [they ran] & CONCOMITANT- WITH [they defecated]

7.2.2 State change

There is one 3-verb chain that seems to have State change as final verb framing event. Consider the chain below:

69)	cm	adv	S ^{ag}	V ¹	V ²	V ³	O ^{pat}	sbn
	...	à	súnà	yí	ká	dib	ðεεkírí	wú yée ...
	...	à	súnà	yí	ká	dib	ðεεkírí	wú yée ...
	...	said	see-pcple	log	take	exit	rescue-PFtr 2s	if ...

“..said, in case I rescue you out, ...?”
txt2:007

Though motion of the figural entity is involved, as seen by the V^2 verb, this is not what frames the whole chain. It is the state of being rescued as compared to its opposite that is the ‘upshot’ here, a change of the condition of the figural entity, or, let us call it the Figure. The chain is transitive and causative, with the V^1 –verb **ka** ‘take’ introducing both properties, as we have discussed before in 6.1.3.1. The $V^1 + V^2$ combination is a chain on its own, though it does not happen to be instantiated in the present corpus. As such it would have a Motion framing event and a Cause co-event. We consequently use the strategy of 64)a) to analyse this chain, grouping V^1 and V^2 together as a nested macro-event within another macro-event. (Since it is the protasis of a conditional sentence, we put *if* outside the framing event bracket, and let the ensemble trail off with three dots at the end since we do not cite the apodosis.)

Formal version: *if* [the Agent “_AMOVES” the Figure to a CONDITION (being rescued)] WITH-THE-CAUSE-OF [[the Agent _AMOVES the Figure] WITH-THE-CAUSE-OF [the Agent takes the Figure]] ...

7.2.3 Action correlating

The three Action correlating chains all have **ni** ‘give’ as V³ –verb, and since each of them has interesting features, we shall discuss all three. We shall start our discussion with one that at V² – position has another verb with an Action correlating effect, thus representing the pleonastic framing event pattern of 63) above.

70) S ^{ag}	cm	V ¹	V ²	V ³	O ^{ben}	O ^{pat}
Kùù ...	à	yúú	yááη	nī	yì	tútòηw wûr,
Kùù ...	à	yúú	yááη	ni-L	yì	tútòηw wûr-L,
grandpa ...	said	work(v)	be.together	give-imp	log.	work(n) field

“Grandfather went to Buram saying Work together with me for my field-work,”
s37:005

In 6.4.1 and 6.4.2 we discussed the comitative verb **yááη** ‘be.together’ and the dative verb **ni** ‘give’ without considering the possibility of combining the two. Nevertheless the combination is fairly frequent in Nizaa, being the standard expression of ‘to help somebody’.⁶⁶

The V¹ –verb can be a verb describing any useful activity, or it can as here be a general verb like **yúú/yí** ‘work’, with a prepositional phrase specifying the activity. In this case the general verb is probably chosen because the speaker does not actually want his interlocutor to go digging and raking with him, but to provide drink for the people who will carry out the actual fieldwork (ex 53) discussed above is a follow-up sentence to the present chain). The work to be carried out by the addressee/Agent will thus not necessarily be done side by side with the speaker, as the V² –verb ‘be.together’ could have indicated, but is a side-line of activity, so to speak, to the line of activity carried out by the speaker/Receiver. Still it is conceptualised as a joint effort, with both parties involved to get the desired result.

The V³ –verb **ni** ‘give’ is the main framing verb in this chain. It generally has the effect of introducing an object with a Benefactive or Recipient role in Action correlating sentences. In this particular instance it furthermore rearranges the syntactic expression of the Agent and the second Agency of the sentence. As we remember, **yááη** ‘be.together’ required a multiplex subject, placing both the Agent and the Agency within the subject. With **ni** ‘give’ the Agency is moved out of the subject and placed in the object, allowing the subject to be singular (though not requiring that it be singular, of course).

As already remarked, we take this chain to be an example of a pleonastically expressed framing event. As usual with Action correlating, the co-event bears a support relation of Constitutiveness to the framing event, being a substrate shaped by the framing event. Even if its pleonastic, each Action correlating verb adds a distinctive part the framing event; the strategy employed is 63)b).

Formal version: [the Agent PUT her Action TOGETHER-WITH Agency's Action & TO-AVAILABILITY-OF the Agency's CONTROLLING] CONSTITUTED-BY [the Agent works]

The next chain of Action correlating has an utterance verb in V² position, hence we are still dealing with a typical setting for an Action correlating framing event. The subject is in ellipsis.

71) **aux** **O^{recp}** **V¹** **V²** **V³** **adv**
 ... à yí seghós gè nyin ni càṇw.
 ... à yí seghós gè nyin ni càṇw.
 aux log mother.in.law go speak give again

"... so that (it) will go to greet my mother-in-law."
 txt1:009

As the translation shows, this chain is close to a purpose clause reading of the last two verbs. Still there are good reasons to interpret it as a true 3-verb chain, and not as 'modal' **ge** 'go' with a 2-verb subordinated chain. In the first place, there is no subjunctive suffix on the last verb. Secondly, though the object has been moved to a preverbal position as is normal in subordinated clauses, this can be explained by the presence of the auxiliary, which has the same effect in some constructions. And lastly, the object is placed in front of all the verbs, including **ge** 'go', something that would have been impossible if **ge** 'go' was really in a matrix clause.

Even though the presence of **nyin** 'speak' is typical of Action correlating, it cannot be said to express this framing event pleonastically, it rather has the role of constituting the content of the Action correlating event. Neither is there any semantic properties of the V¹ and the V² verb that put them in a more stable and context-free relationship with each other. They do instantiate an internal relationship, though, in so far as the 'going' is enabling the 'speaking' within this context. But this relationship must extend to both V² and V³ together, since there will be no 'speaking' without its being in communication with the interlocutor.

To express these considerations in a coherent way, it seems that the best solution is to employ the (63)a) strategy and treat V² and V³ as belonging together in an Action correlating chain, with V¹ as co-event.

Formal version: [[the Agent will PUT his Action IN-COMMUNICATION-WITH the Agency's LISTENING] CONSTITUTED-BY [the Agent speaks]] ENABLED-BY [the Agent goes]

The last sentence with an Action correlating event is, as several of our examples of this framing event, in imperative mode, marked three times by the characteristic tone contours of the verbs. As we have already observed (cfr 6.4.2), imperative is not a constitutive property of Action correlating as such, since the same relation between an Agent and an Agency can readily be expressed in declarative or

interrogative mode as well. Still it is not surprising that the imperative is so frequent: though the ‘giver’ in each case is understood as the party effecting or maintaining a correlation between the actions of herself and the actions of the other, that other may express his wish to come into control of the Agent’s actions, being a ‘wannabe receiver’ so to speak.

72) cm	S ^{ag-voc}	V ¹	V ²	V ³	O ^{ben}	O ^{pat}	Loc
	À Ndáṅndɛ̀ɛ̀,	taà	kwāṅwkí	nî	yíwú	dɛ̀ɛ̀	gúúṅninā.
	À ndáṅndɛ̀ɛ̀,	taa-L	kwāṅw-L-kí	ni-L	yí-wú	dɛ̀ɛ̀	gúúṅninā.
	said spider	weave-imp	ascend-imp-TOT	give-imp	log-PI	bridge	sky-to

“(They) said: Spider, weave and put up for us a bridge to heaven.”
txt7:004

The present chain gives us the opportunity to discuss a further characteristic of **ni** ‘give’: it can appear after the derivational suffixes. We have seen this before, in ex 51) and 54), but without commenting on it, since other topics were more important at that stage.

We stated in Hypothesis 2 that ‘Any morphological material occurring between the verbs signal a looser conceptual integration of the events denoted.’ Does that statement make sense in cases such as 72)? Let us consider at the different elements at play here, in a sentence taken from a long fairytale about all the bush animals going to visit their in-laws in the sky, using a spider’s cobweb for bridge.

The V¹ verb is polysemous, meaning both ‘shoot (arrow)’ and ‘weave (a tissue)’⁶⁷. In the context of the spider it clearly means ‘weave, make net’ –it is the most characteristic activity of a spider. The V² verb then proceeds with ‘ascend’. The V² verb has the **-ki** suffix, usually glossed TOT, short for completive. The sentence is transitive, the Patient object being a bridge. Generally – **ki** ‘completive’ in transitive sentences it marks ‘totality’ of the object. If we apply this notion to 72), it says that a complete bridge must be woven. The verbs together with the object and the locative phrase can be paraphrased as something like ‘weave a bridge upwards to heaven’. Then the ‘giving’ event is expressed with **ni** ‘give’, immediately followed by the Benefactive object, not the Patient Object, in the standard way.

Whatever else may be said of the interpolation of suffixes in chains with **ni** ‘give’, it does produce a group of V¹ + V² to be framed by V³. The 64)a) strategy also seems to be the one applying here: The V² –verb frames V¹ with another framing event than the final V³.

Before going on to a discussion of the validity of Hypothesis 2 concerning the presence of other morphological material between the verbs, let us present the formal version of 72).

Formal version: [the Agent PUT his Action TO-AVAILABILITY-OF the Agency’s CONTROL] CONSTITUTED-BY [[the Agent _AMOVES UPWARDS] WITH-THE-SUBSEQUENCE-OF [he weaves a bridge]]

7.2.3.1 *Interpolation of derivational suffixes*

Now why should **ni** ‘give’ appear after the **-ki** ‘completive’ suffix? We can perhaps imagine that the whole bridge of 72) should be completed before the Benefactive participants should take control of it. But this seems a little far-fetched, since a condition of completeness before final taking control of the Agent’s Action or output of action would be a natural part of many of the **ni** ‘give’-chains we have already discussed, without being marked with **-ki**.

Another explanation may be sought in the notion of **ni** ‘give’ as ‘case-marker’, that is, as a marker of an object with Recipient or Benefactive role (indirect object). Such use of a GIVE verb, often grammaticalizing to a preposition meaning ‘to’ or ‘for’, is well known from other languages with serial verb structures (Lord 1993, chapter 3). As far as its position after derivational suffixes is concerned, **ni** ‘give’ in its capacity as marker of grammatical relation would then presumably have a looser connection to the real events of the verbs in front of the suffixes.

But this idea is once more difficult to sustain –our whole analysis of the use of this verb has shown that it is intimately connected with the events of the other verbs, taking the role of framing event. Furthermore indirect objects with a comparable recipient role may well be introduced into the sentence without the presence of **ni** ‘give’, cfr the discussion of utterance verbs in 6.4.2. So while Nizaa **ni** ‘give’ obviously has something in common with an indirect object marker, it does not seem to be the grammatical relation of indirect object as such that governs its presence or absence in the sentence.

The explanation may be simpler, based on morphosyntactic rules. Nizaa verbs can basically be divided into two groups, those that take the **-ki** suffix and those that do not (the smallest group). **ni** ‘give’ is in the last group, and thus bars the attachment of the **-ki** suffix to itself, forcing it to land on the next candidate counting from the end.

Why **ni** ‘give’ and other verbs (notably a group of motion verbs) do not accept suffixing with **-ki** is another matter, and limited space and our present state of knowledge do not permit any discussion on this point. What we may observe is that these verbs can be present in a chain where another verb carries the suffix, but can not carry it themselves. But also other suffixes are put in between **ni** ‘give’ and the preceding verb, e.g. **-a** as in ex 51), though these other suffixes do not seem to have the same combinatorial restraints as **-ki**.

The conclusion on the validity of Hypothesis 2 must thus be that within chains, the interpolation of derivational suffixes between V^1 before **ni** ‘give’ as V^2 , or between $V^1 + V^2$ before **ni** ‘give’ as V^3 , signals that the first part forms a macro-event on its own, with another framing event than Action correlating. As such it is not structurally different from other chains with an different macro-event in the co-event slot, as discussed above with e.g. **ge kwee juun** ‘go-find-return’ which we analysed as having a State change chain as co-event to a Motion framing event, or **ká dib 6ee** ‘take-

exit-rescue’ with Motion framing-event in co-event position and State change as final framing event. Still the presence of a derivational suffixes makes this structure overtly marked, underlining the conceptual fissure between the first and the second part.

Action correlating is therefore a prime suspect among the framing event of generally having a different relationship to its co-events, since **ni** ‘give’ is nearly alone with this behaviour, And in fact the support relation of Constitutiveness seems to be the only one extant with Action correlating, both in our examples from Nizaa and in Talmy’s treatment of this framing event (Talmy 2000-II: 253-261).⁶⁸

Co-events as Cause and Manner usually will be taken from a more restricted domain of possible events, e.g. Manner with Motion will typically cover events of self-contained motion or sound-emittance.⁶⁹ In contrast the Constitutive support relation to Action correlating can have just about anything as co-event.

7.2.3.2 Realization with *se* ‘see’

The only other verb showing the same behaviour of allowing interpolation of derivations between itself and preceding verb(s) is **se** ‘see’, and in the present corpus there is only one occurrence of such a structure. It is presented in 73).

73)	V ¹	V ²	V ³	O ^{pat}
	Goo	tènkí	se	yí ɓuú, ...
	Goo	tèn-kí	se	yí ɓuú-L, ...
	chop	sever-TOT	see	log head

“Try and chop entirely off my head, (so that it can go to greet my mother-in-law again.”, cfr ex 71) above)
txt1:009

We have already treated the second clause of this sentence as ex 71). When now looking at the first clause, we can appreciate the joke of the story: the Hare has been lured into thinking that the head of a person can go separately to visit another, while the body does other things. In 71) he thus asks his wife to chop off his head, with a deplorable result further along, of course.

The V¹ + V² combination is a Realization event, where the intention of the ‘chopping’ action of V¹ to cause ‘severing’ is fulfilled in V² + the **ki** ‘completive’. Then **se** ‘see’ is brought in, predicated of the same subject as the two first verbs. Its meaning in 73) is perhaps something like ‘let’s try’ or ‘let’s see’.

At first sight this does not rhyme very well with Realization, since this framing event is supposed to fulfill or confirm an intention etc. But it may be regarded as a ‘resection’ type of event, cutting back on the assurance of V¹ and V². This type of ‘negative’ Realization event was discussed in the introduction to 6.5 on Realization, it is in fact more typical in English than ‘positive’ confirmation or fulfillment framing elements. However, in our example we can hardly see it as cutting

back on the intention of the speaker to have his head chopped off, though, at least he goes through with it. Perhaps it is not the intention of carrying out the beheading that is resected here, but the outcome is presented as something that may work or not.

No formal version of this example is presented. Instead we shall take a look at the only other instance of **se** ‘see’ as final verb, given as 74) below, even though it is a 2-verb chain.

74) S^{em}		cm S^{ag-voc}	V¹	V²		S^{ag}	V¹	O^{pat}
Nìì	nwààṅ	à	díwu	dí	sériré	yí	yérǎ	nwààṅ.
nìì	nwààṅ	ǎ	díwu	dí	se -ri-rē	yí	yera	nwààṅ
person	fight	said	2pl	come	see-hither-v.detr	1pl	begin	fight

“The fighter said you seem to have come, so let us start the fight!”
txt5:034

It is again difficult to understand exactly the meaning of this chain, and its classification as pertaining to Realization is more a guess than an established fact. The arguments for nonetheless doing so are presented below.

The first decision to make is whether the chain is a disguised matrix clause with embedded purpose clause. **dí** ‘come’ can occasionally function as ‘modal’ verb in a ‘come to do’ structure paralleling the ‘go to do’ structure (the very next sentence of the text appearing as ex. 68) in Appendix A has just such ‘modal construction’ with **dí** ‘come’ and the verb **swiinj** ‘to look’). In that case the sentence says something like ‘since you have come to see, let us start the fight’. But the present chain simply does not have the trappings of that construction. Moreover, what makes this interpretation rather unlikely is the fact that the speaker addresses people who have come with the specific purpose of fighting with himself, and so can hardly be said to have come ‘to see’. Furthermore there is no overt subjunction with ‘since’ or ‘as’ meaning.

The proposed solution takes **se** ‘see’ to be a Realization framing event of the ‘resection’ type. Again we are hindered from reaching certain conclusions by the lack of knowledge of the ‘intentional scope’ of Nizaa verbs. Is **dí** ‘come’ really a conative verb, or a fulfilled verb? We do not know for certain its status, but surmise that it is a fulfilled verb, and that the V² verb **se** ‘see’ has the effect of casting doubt on the fact the these persons are present.

A tentative formal version is given below, with POSSIBLY as a not very sophisticated term for the ‘resection’ of Realization.

Formal version: [the Agents have POSSIBLY “_AMOVED” TO CONFIRMATION the INTENTION (to be PRESENT)] CONSTITUTED-BY [the agents have come]

7.3 Four-verb chains

There are only three 4-verb chains extant in the corpus. All three have in final position verbs that we have already met with in this position, expressing respectively Motion, Realization and Temporal contouring. We shall discuss all three, citing for once the whole sentence and not just the chain clause

Yet again we will use the idea of the final verb as framing event, along the lines established in treating 2- and 3-verb chains.

Let us start with the 4-verb chain with a Motion framing event (the second clause of the sentence has been discussed as ex 34)).

75) S ^{ag}	adv	V ¹	V ²	V ³	V ⁴	O ^{pat}	Loc
Mbéw dāà kǔm	baá	taáŋ	yεε	jíwci	ɲú cún yèè	konā,	
Mbéw dāà kǔm	baá	taáŋ	yεε	jíwci	ɲú cún yèè	konā,	
monkey	other	while	seek	eat	change	roam-pres 3s	tree fruit bush-in
aux	O ^{pat}	V ¹	V ²				
ā	nǎm	dí	kwεεkìwí.				
ā	nǎm	dí	kwεεkìwí.				
aux	hyena-df	come	find-TOT-pst.				

“A monkey who just then was roaming about seeking and eating his tree nuts in the bush, came and found the hyena.”
txt2:004

The first thing to note is the presence of the already known combination **yεε jíw** ‘change-roam’ as V³ + V⁴, marking this element as a pleonastic expression of Motion. V¹ and V² can be taken as a combination of two events carried out concomitantly. The scenario of the chain is ordinary enough: the monkey looks for tree fruits and eat them on the spot as he finds them, moving along without a strictly directed path. We must once more admire how this whole scene is neatly packaged into a verb chain, producible and understandable at low cognitive cost.

As chain structure we have two alternating co-events where both are concomitant with the double framing event of roaming about.

Formal version: [the Agent _A MOVED TO different locations in an area] WITH-THE-CONCOMITANCE-OF [[the Agent sought fruits] ALTERNATING-WITH [the Agent ate fruits]]

Going on to the next 4-verb chain, we find as final verb **tam** ‘be.solid’, used for a Realization framing event in 2-verb chains. But another type of framing event is involved here.

76) S ^{ag} rel:	V ¹	V ²	Neg	]	V ¹	V ²	V ³	V ⁴
Nìi	taŋ fùùà		fá		lâw nyín	da	shiw	tamkí
nìi	taŋ fuu		-à		fá lâw nyín	da	shiw	tam-ki
person	eat be.satisfied-n		not		this stand	legs.apart	be.strong	be.solid-TOT

Adv	V ¹	V ²	O ^{pat}	V ¹	O ^{pat}
lɔɔŋ	haaŋ	dīikí	nùùŋ	ɔwaŋw-cí	kòm làw.
lɔɔŋ	haaŋ	dīi -ki	nùùŋ	ɔwaŋw-cí	kòm làw
well	yawn	leave-TOT	mouth	wait -pres	tree.spec. that

“The man who was not satisfied by eating, planted solidly his feet
squarely apart, opened wide his mouth, and waited for the kom.”
txt5:031

The chain in 76) could be considered an event of _{BE}LOC with Manner co-events, only the last two verbs so clearly are State verbs. State change therefore seems to be a more relevant category, the figural entity here entering a state of ‘strongness’ or ‘being.secure,’ as it were. Again the last two verbs can be considered a double expression of the framing event. The V² verb describes a Manner of standing or the taking of a special stance. The first verb **nyín** ‘stand’, is itself a Motion stationary verb with Manner conflated into it. It seems that both V¹ and V² denote standing and thus are expressing _{BE}LOC, with added semantic material of the Manner of being located conflated into them. We can consider V¹ and V² as a macro-event with framing event of Motion and co-event of Manner, further framed by the State verbs V³ and V⁴, the whole chain adding up to something like ‘taking a body posture with an extreme amount of securing it’. We will try a formal version with 2 verbs in each element of the macro-event.

Formal version: [the Agent “_AMOVED” TO a STATE (BEING strong & BEING solid) CONSTITUTED-BY [[the Agent stand with his legs apart] ENABLED-BY [the Agent stands]]

The last 4-verb chain in the corpus employs **ba** ‘finish’ as final verb. This is a common verb in Temporal contouring events.

77) S ^{ag}				V ¹	V ²	V ³	V ⁴
Nyààŋ	gàw	wú	nyààŋ	ceraarî	nyán	du	kwaŋw ge bará.
Nyààŋ	gìw-pl	wú	nyààŋ	ceram-pl	nyán	du	kwaŋw ge ba-rá.
animal	big-pl	with	animal	little-pl	all	advance ascend	go finish-Pfdetr.

“The big animals and the small animals all left and ascended to the very last one.”
txt7:006

The combination of V¹ and V² we have discussed before in the context of 3-verb chains. We repeat the supposition that these two verbs doubly express a Motion event, and as in the case of above where it had **jín/juun** ‘return’ as final framing verb, we take the present chain with **ge** ‘ge’ as V³ to have a triple expression of Motion (cfr Table 7-2).

The V⁴ verb then brings in the notion of ‘finishing’. We observed in 6.2.3 that when used of a process on a Patient, the verb denotes equally a complete affectedness of the Patient and a completion of the activity as such. The same ambiguity is present here, only applied to a group of Agents instead: do they finish the going away upwards (= they arrive), or is it the whole group that goes (no one left = the whole group is affected)? Possibly the second interpretation is available only with a multiplex Agent. We have chosen it in the free translation above, but the other option is just as likely. The context of the following sentence rather points to this solution, going straight on with activities undertaken by the group after arrival at destination.

As in the case of 2-verb chains we present a formal version built on the aspectual interpretation, understanding the co-event verbs to describe the process of journeying and the framing verb to describe it as finished. Instead of the process as something affecting a Patient, it must be seen as process carried out by Agents, e.g. as activity. The group of entities carrying out the activity of journeying forms the figural entity of the sentence.

Formal version: [the Agents “_AMOVED” an activity to COMPLETION] CONSTITUTED-BY [the Agents _AMOVED FORWARD & UP from a location]

7.4 Summary of 3- and 4-verb chains

In chapter 7 we have treated 16 chains with 3 verbs and 3 with 4 verbs, finding that Motion is the most frequent event type also in these chains, with 12 instances. The other types were considerably less frequent, Action correlating with **ni** ‘give’ being in second place with 3.

When summing up the findings on the longer chains, we may note that the hypothesis of the final verb as framing event has been upheld. We have found several instances of this framing event being pleonastically expressed, especially in the domain of Motion events. The importance of **jɪŋ/juɪŋ** ‘return’ as final verb of such pleonastic expressions was noted again, but other typical final verbs and verb-groups were found to have the same effect.

A new feature was the existence of complex co-events, either in the form of pleonasms as above, or as hierarchical structures, where a macro-event framed by one event type, would be embedded as co-event to a framing event of an other type. A third possibility was concomitant or alternating co-events. The chains are good examples of how much information can be processed in a backgrounding way by conflation into the verbal complex of the sentence.

8 CONCLUSIONS

In the following paragraphs we will draw attention to the most significant finds of the analysis. Then we will discuss some further details of the analysis, commenting upon the relation between the Hypotheses presented in chapter 5.5 and the actual finds. Finally, we will bring in the perspective of grammaticalization and the question of typological categorization of Nizaa as verb-framed or satellite-framed.

8.1 Macro-events in verb chains

In accordance with Hypothesis I, we have shown that chains are complex macro-events, integrating in a principled way the events denoted by each verb. We have also presented evidence of the idea that any further material introduced between the verb of a chain will signal a looser conceptual integration (cfr 6.1.1 and 7.2.3.1), as proposed in Hypothesis 2.

Within the chains as macro-events, we have found a very consistent pattern of the final verb as locus of the framing event. The first verb is as consistently expressing a co-event. The pattern is established on the basis of 2-verb chains, but is evident also in the longer chains of 3 and 4 verbs. This confirmation of Hypothesis 3 and Hypothesis 4 fact is perhaps the most important outcome of the analysis.

A second outcome is the fact that we succeeded in assigning all the chains to one of the 5 types of framing event proposed by Talmy, thus lending probability to the view that these categories are in fact relevant types of complex events.

8.1.1 Framing events and co-events

Once the hypothesis of the final verb as locus for the framing event is established, the framing event of many chains is distinct and clear, providing an easy choice for the analyst. This is not true of all cases, of course, something the two preceding chapters have shown, but an amazing number of the chains were easily categorized with respect to framing event. In comparison, the choice was considerably less clearcut when deciding on the co-event, and often the choice made did not change decisively the content of the total chain as compared to another possibility of support relation.⁷⁰ The following characteristics of the data can be shown to relate to this ‘distinctness of the framing event’.

In the first place, it chimes in well with the general idea of the framing event as the ‘up-shot’ of the sentence, that is, the event that is asserted, or denied, or asked about. But the framing event as determiner of all or most of the argument structure and the overall semantic character of the

arguments, was on the other hand found to be less apt for Nizaa: the co-event verb was shown to participate actively in assigning argument structure to the chain in several chains.

Secondly, we proposed semantic compatibility with a framing event as a prerequisite for a verb to be used in final verb position (Hypothesis 5). This was borne out in the sense that no chain has been found where the final verb is not compatible with a type of framing event. On the other hand it seems that use in final position may emphasize strongly one meaning component of a verb to the detriment of another. We still hold that some meaning component of a verb used in final position, i.e. as framing event, in all cases can be shown both to exist in other usages of the verb and to be compatible with a framing event type.

Thirdly, we proposed in Hypothesis 6 that verbs used both as V¹ verb and V² verb in different chains, would still follow the general co-event –framing event pattern when appearing in V¹ position. This was also supported, so that these verbs in some cases was used as pleonasm, thus evading a further specification of a co-event, and in other cases was bearing a co-event to some framing event of another type than itself.

As a fourth point, let us draw attention to Hypothesis 7. It proposed that the Vector component of the Path generally is found in the verb, while the directional suffixes provide Conformational and Deictic information (cfr 5.4.1.1). With Motion framing events, they consistently provided further information on the general idea of motion expressed with the verb, like **-a** ‘illative’ implying that the Ground was an enclosure, **-wa** ‘distantive’ depicting the motion as going away from some location, and **-ri** ‘allative’ depicting the motion as directed towards the deictic center of the sentence, and so on.

8.1.2 The ‘story-line’ connection

Hypothesis 8 proposed that the framing event of a clause would be either part of the main line of events, or be the event that connected the clause with the main line in sentences of more supportive material. We have used this idea frequently going along, though not always directly commenting on it. It has generally been helpful to look at the context to decide what the event at issue must be, something that also is reflected many places in the preceding chapters.

Heavy use of context is especially important in a language like Nizaa, which so extensively use zero anaphora as referential device: a participant already known from the context, can readily be excluded from a sentence. To draw substantial conclusions on e.g. syntactic structures without referring to the context can thus be fairly misleading. We have tried to avoid such faulty conclusions by often referring to contextual information.

8.1.3 The chains and backgrounding

As we have already noted, the longer chains present the same general pattern of co-event framing event as the 2-verb chains. In a number of cases, we found that the framing event was doubly expressed, often with the same 2-verb groups as was already identified as pleonasm in the context of 2-verb chains. Such pleonasms occurred also in co-event position. A third pattern found was hierarchical, with one 2-verb chain embedded as co-event to a further framing-event. Lastly 2 verbs could concomitantly be framed by a third, or alternate in a concomitance relation to the framing event.

In all these cases, together also with the 2-verb chains, one can not but admire the efficiency of the chain structure. Chains pack much information into few items, and the information is backgrounded and presented in an inobtrusive fashion.⁷¹

This must not be confused with the idea of main line and supportive material above. That perspective points to the fact that also verbally packed information necessarily plays a role in a larger context if the sentence belongs to e.g. a narrative. The framing element within the verbal complexes of several sentences will then carry the key events of the narrative, bringing the story on.

Conversely, the idea of backgrounding of semantic material by being expressed in the verbal complex points to this constituent as a locus of presenting information in a low-cost way within the sentence. As a sentence-level effect, it does not directly interact with the text-level notion of ‘story-line’.

Obviously it would be a most interesting task to bring these two perspectives together.

8.1.4 Further comments on the framing event types

The last two of the framing event types are comparatively new notions in linguistic literature and we shall comment some more on them.

8.1.4.1 *Action correlating*

Action correlating was a pleasant surprise as framing event, opening up an observed linguistic pattern in Nizaa for a deeper understanding.

The notion of coactivity serves to give a coherent explanation of the relation between utterance verbs and benefactive events, both framed by **ni** ‘give’. In both cases the Agent instigates and maintains a situation where a second Agency’s action is fixed in relation to his own action. In the case of utterance verb + ‘give’ the second Agency’s action is ‘listening, being attentive’, in the case of benefactive events it is ‘taking control’ of whatever the benefactive element provides him with. The use of **ni** ‘give’ with utterance verbs can by virtue of the notions of Action correlating and coactivity be related to other verbs used in a dialogue situation, thus providing a more extensive insight into the conceptualizations of this domain.

Such an Action correlating reading of linguistic structures having some item denoting GIVE should be useful in the analysis of a number of languages, whether the GIVE element is present as a verb or verb-like word in serializing languages, or as a derivation in languages of verbal extensions.

8.1.4.2 *Realization*

Realization turned out to be the most tricky type of framing event, in the sense that very few chains seems to have this framing event, and those proposed are somewhat uncertain. A constant problem has been uncertainty of the ‘intentional scope’ of Nizaa verbs: does a certain verb imply that its intention is fulfilled or not?

We propose here an account for this phenomenon. Possibly most Nizaa verbs, like English, are not ‘conative’, but ‘fulfilled.’ A further element asserting fulfillment or confirmation is therefore not necessary. If present, it serves perhaps rather to intensify the event, thus not quite falling into the category of Realization as explained by Talmy. If Nizaa verbs generally are ‘fulfilled’, it is not very surprising that few Realization events were found. It also explains the difficulty of finding an idea of fulfillment or confirmation in the verb **se** ‘see’, which we tentatively have put into this category. This particular verb is better treated as being of the ‘resection’ type of Realization, cutting back on the meaning of a ‘fulfilled’ verb, rather than confirming the intention of a ‘conative’ verb.

8.2 Grammaticalization issues

We announced in the summary of chapter 6 that **jɪŋ/juɪŋ** ‘return’ needs some deeper attention, and this will be the theme for the following remarks.

As we have seen, **jɪŋ/juɪŋ** ‘return’ is the most frequent verb of chains and it is very consistently used in final position. The only non-final use is with **ni** ‘give’ as final verb, itself the second most frequent verb in chains. In these cases **ni** is used as allative **–ri**; by one analysis it can even be considered to be an allomorph of this morpheme, though we have chosen to treat it as a verb. We have no occurrences of **jɪŋ/juɪŋ** ‘return’ being used completely on its own in simplexes.

In 6.1.8 we discussed the related meanings of **jɪŋ/juɪŋ** ‘return’, showing that it has extended its meaning from describing a Path in relation of a location, to describing a temporal “Path” in relation to some event, the connection being found in the ‘previous’ component of the meaning. We furthermore proposed it as expressing a framing event of Realization in 6.5. Such a wide range of semantic categories may be interpreted as indicative of a ‘bleaching’ or generalization of the content, a well known phenomenon in the context of grammaticalization. Its very frequency is also indicative of a grammaticalization process: when the semantic range covered by a lexical item widens, it becomes eligible in new contexts, and thereby more frequent (or one could postulate the already existing frequency as a way of extending the semantic range; this process is interactive with frequency, it seems).

Other verbs in the corpus display the same tendency of polysemy and narrow range of use. We have noted on **yee** ‘change’ which was found to express 3 different framing events. Another Motion event framing verb with no simplex uses attested is **kwajw** ‘ascend’. Some of the verbs of Temporal contouring are oscillating between this and a State change meaning. Other verbs again, like **ge** ‘go’, are also frequent, but this verb provides an interesting contrast by being is the most versatile verb of the corpus, but without any tendency to widen its sense and narrowing its use to one particular function of being framing event. Most importantly it is readily used with full lexical meaning in simplexes. If it is getting grammaticalized it is not in the context of final framing verbs, but perhaps in its use as ‘modal’ verb with a subjunctive ‘main verb.’

An interesting parallel is provided by Hindi ‘vector verbs’ (Hopper & Traugott 1993: 108-110). They are described as quasi-auxiliaries, being finite and carrying markers of aspect, tense and mood. Used with more contentful main verbs, they add to the verbal complex semantical nuances of aspect, direction and benefaction. They often express perfectivity or completeness.⁷² The list of examples of such ‘vector verbs’ is informative as well: it includes ‘go,’ ‘give,’ ‘take,’ ‘throw,’ ‘come,’ ‘sit,’ ‘fall,’ ‘get up,’ ‘strike,’ and ‘let go,’ some of which are equivalent to a number of the verbs treated by this thesis.

These ‘vector verbs’ are cited as the first stage in the unidirectional cline towards grammaticization from being a full lexical verb, the next stage being auxiliaries, then clitics and affixes. Obviously the most frequent ‘final’ verbs of the Nizaa chains can be seen as having started on this process. But it should also be clear from the preceding chapters that most of these verbs still preserve a full lexical content and the full panoply of verbal morphology. Again **jij/juuj** ‘return’ is the most outstanding special case: it is not any longer quite consistent in the morphophonological alternation between **jij** and **juuj**.⁷³

The notion of grammaticalization opens up another interesting perspective on Nizaa verbs, or more accurately, on the derivational suffixes. Are they former ‘final verbs’ now so far down the cline of grammaticalization as having become suffixes? In a language practically unrecorded till 1979, it is difficult to know. A study of internal change has been carried out, though, (Endresen 1992), and the knowledge of correspondences with proto-Bantu may provide clues to earlier forms of these suffixes.

Within the space of this thesis it is impossible to pursue the theme of grammaticalization any further, it must await further research. In any case, verb chains have proved to be a fascinating study in its own right, as a synchronic phenomenon.

8.3 Verb-framed or Satellite-framed?

By having Motion and Path conflated as the most typical pattern in the verb root, Nizaa can be said to belong to the **verb-framed languages**. Our whole analysis of the chains is based on this assumption of Nizaa being verb-framed.

Nizaa chains, as is typical of serial verb-constructions in many languages, present several events as a ‘chunk’: they are conceptualised as a single fused happening, and the verbs occur together in the normal verbal slot of the clause. According to the first four hypotheses, we see chains as complex macro-events, with the non-final verb(s) of the chain bearing the additional semantic material. The final verbs bear the framing event, and so the language can be said to be verb-framed.

Now According to Talmy, verb-framed languages, with conflation of Motion and Path, generally do not allow additional material such as Manner and Cause to be expressed in the main verb. It must be expressed in an independent constituent, usually adverbial or gerundive-type (Talmy 2000-II: 49). How can this notion be reconciled with the structure of Nizaa chains? After all, the co-events are expressed by verbs in a very similar way to framing events, instead of being syntactically more independent constituents such as adverbials or gerundives.

Would it be possible to see the non-final verbs as satellites⁷⁴? Verbs are cited as one of the categories that may partially overlap with some group of satellites in a language. Chinese and Lahu are given as examples in casu, Lahu being described as a Tibeto-Burman language with lengthy verbal sequences (Talmy 2000-II: 102). But the first-position verbs in Nizaa chain can in no way be considered a closed class or to be grammaticalised elements, on the contrary the first position sports a very varied and basically open-ended list of verbs, as seen in the tables of 3.2. It is accordingly difficult to assign satellite status to these verbs, also because they, without a clear shift in meaning, usually can occur as simplexes.

A much more obvious candidate for satellite status is the final verb. As we have seen in 3.3, there is a specific group of verbs with a marked tendency of last position occurrence. There is also a certain tendency to grammaticalization with some of these verbs, as we saw in 8.2. One could possibly simply define these items as satellites and put Nizaa in the category of satellite-framed verbs. The framing event could then be said to be expressed in the verb-like final ‘satellite’, while co-events could be said to be expressed in the ‘main verb’ of first position.

We have chosen not to do this, though, for a number of reasons. First, recall the frequency tables of chapter 3.2 and 3.3: while clearly having a cluster of ‘final verbs’, the position of final verb is essentially open to a much wider range of verbs than these, it is not a closed set.

Secondly, some of the verbs are going back and forth between a first and a final position, which would be require them to be part of a closed set of satellites in one position, and part of an open

class of verbs in the other position. This is not inconceivable, cfr. the example of Lahu cited above, but perhaps not a very intuitively satisfactory solution.

Thirdly, all the verbs in chains very much behave as verbs in so far as morphological trappings are concerned. Admittedly, the non-final verbs do not present any derivational or inflectional suffixes in chains (except in some cases where **ni** ‘give’ and **se** ‘see’ is the final verb). But the ‘naked’ forms of the non-final verbs are not necessarily so because of the requirements of the chain structure, they may be so also in simplex use, as part of running narrative texts. Both the first and the final verbs may also be without any suffixes in a given chain in context.

Forthly, both in simplexes and in chains, nearly all the verbs demonstrate the alternation between the strong-grade and the weak-grade root-form, in so far as the individual verbs have this alternation.

A final point is the difference between simplexes and chains: If chains represent satellite-framing, shall we then say that simplex verb clauses are verb-framed?

When summing up these points, we tend to stick to the notion of Nizaa as verb-framed. This gives a more coherent picture of the language structure. The problem of the close syntactic unity between the co-event and the framing event in this verb-framed language as compared to other verb-framed languages can be considered not a problem, but an interesting subject for further research on these typological categories.

APPENDIX A: LANGUAGE EXAMPLES

Below are full sentence versions of the language examples in the thesis. The numbering corresponds to the numbering in the thesis text.

2) S^{exp} V¹ V² S^{exp} V¹ O^{pat} [S^{pat}

ŋu wààwu se kekirá, ɓulɔ̀ɔ̀ŋ sewu mbân kùù fɔ̀ɔ̀

ŋu wàà -wu se ke -ki -rá ɓu lɔ̀ɔ̀ŋ se-wũ mbân kùú fɔ̀ɔ̀-L

3s grandchild-pl see know-TOT-PFdetr. they these see-past place grandpa staff-DF

V¹ V²] V¹ NEG O^{recp} V¹ V^{2-sub}

ɗag gewunâ, yééwú-ŋwǎ kùù kpááŋ nìwà.

ɗag ge-wũ-nà yéé-wũ-ŋwa kùú kpán ni-wà

fall go-past-pcpl will-stative-not grandpa talk give-sub

" His grandchildren have seen and know, they saw the place grandpa's staff went and fell into, they do not want to tell him."

s42:004

4) S^{pat} V¹ adv S^{ag} Rel:[V¹ Neg]

Kòm tííŋ gîw ɗàà nyínwú wân dínâ, nì nwaàŋ njéwâ fâ lâw

kòm tííŋ gîw ɗàà nyín-wũ wân dín-nâ nì nwaàŋ njéw-à fá lâw

tree.sp. trunk big one stand-stat. chief yard-in person fight tire.of -not not Dem.

V¹ V¹ O^{pat} adv^{instr} V¹

yúúwarê, ɓugki kòm tííŋ lâw wù ɓwáá mum, subkirê,

yúú-wa-rê ɓug-ki kòm tííŋ lâw wú ɓwaa mum sub-ki-rê

rise-from-v.detr grip-TOT tree.sp. trunk Dem with hand one tear.up-TOT-v.detr

V¹ V² S^{pat} V¹ V² adv

mbúú kwanwrê, kòmcún lâw múúŋ ran-áwa gúúŋninâ.

mbúú kwanw-rê kòm-cún lâw múúŋ ran-a -wa guuŋni-nâ

throw ascend-v.detr tree.sp.-big Dem disappear vanish-into-from sky-in

"A great kom-tree was standing in the chief's yard. This man who didn't tire of fight, rose up, gripped that kom-tree with one hand, tore it up with the roots, threw it upwards, the big kom-tree vanished away into the sky."

txt5:029

5) S^{ag-Aux} O^{pat} V¹ V²

Wàà lúguùŋ soŋw jér gur ɗìi.

wu-à lúguùŋ soŋw jér gur ɗii

2s-aux maize bowl 10 buy put.away

"You shall buy and stow ten bowls of maize."

txt6:004

6) S^{pat} V1 adv S^{ag} Rel:[V¹ Neg Dem]
Kòm tííḡ gìw dāà nyínwú wān díḡnā, nìi nwààḡ njéwā fā lâw
kòm tííḡ gìw dāà nyín-wú wān díḡ-nā nìi nwààḡ njéw-à fá lâw
tree.sp. trunk big one stand-stat. chief yard-in person fight tire.of -not not Dem.

V¹ V¹ O^{pat} adv^{instr} V¹
yúúwaré, ḡugkí kòm tííḡ lâw wù ḡwáá mum, subkiré,
yúú-wa-ré ḡug-ki kòm tííḡ lâw wú ḡwaa mum sub-ki-ré
rise-from-v.detr grip-TOT tree.sp. trunk Dem with hand one tear.up-TOT-v.detr

V¹ V² S^{pat} V¹ V² adv
mbúú kwanḡwré, kòmcún lâw múúḡ ran-áwa gúúḡninā.
mbúú kwanḡw-ré kòm-cún lâw múúḡ ran-a -wa guuḡni-nā
throw ascend-v.detr tree.sp.-big Dem disappear vanish-into-from sky-in

“A great kom-tree was standing in the chief’s yard. This man who didn’t tire of fight, rose up, gripped that kom-tree with one hand, tore it up with the roots, **threw it upwards**, the big kom-tree vanished away into the sky.”
txt5:029

7) S^{ag} V¹ V² O^{pat} adv PP V¹ V²
Nàw kipôm ka ge ḡuro wān jèè, wú wān nyin yεεkiré.
nìi-Pl kí- pôm-L ka ge ḡwi-ro wān jèè wú wān nyin yεε-ki-ré
they ana-villageDF take go 3pPl-ana chief at with chief speak change-TOT-v.detr

“The people of that village **brought them to the chief’s (place)**, to exchange speech with the chief.”
txt5:007

8) adv PP S^{ag} V¹ V² O^{recp}
Nàró fààḡ wān ḡóg yóóḡkí níḡtāḡw
níiPL-ró fààḡ wān ḡóg yaḡ-ki nitamPL
they-ana behind chief call assemble-TOT people

Apposition adv
ndwèéḡ wú njéèḡ nyáḡ ḡú díḡnā.
ndũñPL wú njānPL nyáḡ ḡwi díḡ-nā
men with women all 3s yard-in

“After them, the chief **called together the people**, both men and women, **in his courtyard**.”
txt5:013

9) **adv** **S^{exp}** **Aux** **V¹**
 Ced fá nàró à wáána
 ced fá nàw-ró à wáá-nà
 little not they-ana aux hear -participle

S_{aut}				Aux	V¹	V²
kòm	gìw	cùn	cèèŋ	á	ḡḡ	juṇsǎrìwà.
kòm	gìw	cùn-L	cèèŋ	á	ḡḡ	jiŋ-sa-ri-wà
spec.tree	big	treeDF	noise	aux	swish	return-down-towards-subj.

“Not a moment after they heard the noise of the big kom-tree as it **swished back downwards again.**”
txt5:030

10) S^{ag}	V¹	V²	Aux	V¹	O:Rel [S^{pat}	V¹	adv
Nitəŋw	loo	yaɑŋriɾé	à	kwɛ̃ɛ̃ -nà	Dùù ɓuɦ	gwɛɛwu	dɪŋ
nitam-Pl	loo	yaŋ-ri-ré	à	kwɛɛ-pcpl	dùù ɓuɦ-L	gwɛɛ -wũ	dɪŋ
people	run	assemble-to-v.detr	aux	find-pcpl	hare headDF	stay-stat	apart

S^{pat}	V¹	adv	V¹
ηwiŋ	gwɛɛwu	dín,	kúkírā.
ηwiŋ	gwɛɛ-wũ	dín	kú-ki-rā
body	stay-stat	apart	die-TOT-past.detr.

"People came running to, finding Hare's head lying a part, his body lying a part, dead."
Txt1:012

11) S^{ag} V¹ O^{pat} adv S^{ag} V¹ V² O^{instr}
 Mbêw ðíiasá ǵú kpǎŋ túù nùùŋnà, nǎm záá kwaŋwki kíniŋ,
 mbéw-L ðii-a-sa ɲu kpǎŋ tuú nùùŋ-nà nǎm záá kwaŋw-ki kí-niŋ
 monkeyDF put-into-down 3s tailDF hole mouth-in hyenaDF swing ascend-TOT it.in

S^{ag}	V¹	V²	O^{pat}
mbêw	pan	dib-ki	năm.
mbéw-L	pɛɛŋ	diw-ki	năm-L
monkeyDF	carry	exit-TOT	hyenaDF

"The monkey put his tail down into the mouth of the hole, the hyena swung up with it, the monkey lifted the hyena out."
txt2:009

12)	S^{ag}	V¹	V²	V³	adv	Aux	V¹	V²
	Kùù	kí	yí	jìŋ	wú fààŋ,	á	ḃóó	gèwà.
	kùú	ki	yúú	jìŋ	wú fààŋ	á	ḃóg	ge-wà
	grandpa	cut	rise	return	with back	aux	cry.out	go-sub

"Grandpa returns at full speed, crying as he goes."
s38:005

13) V¹ V² adv S^{ag} V¹ V² adv Loc V¹ V² Loc
Dib ndoŋrē, kǎ fààŋ mǎǎŋ dib ndoŋwú caŋw ɲu yeŋw, gé jʉaŋ ɲu pôm.
dib ndóŋ-rē loc fààŋ mǎǎŋ dib ndón-wú càŋw ɲwi yéŋw ge jɪŋ ɲwi pôm
exit pass-v.detr at back friend exit pass-pst again 3s thing go return 3s village

“He went off, behind him the friend also went off on his way, going
back to his village.”
txt4:023

14) S^{exp} V¹ V² Sexp V1 O^{pat}
ŋu wààwu se kekirā, ðulǎàŋ sewu mbân
ɲu wàà-wu se ke-ki-rā ðu-lâw-pl se-wú mbânL
3s grandchild-pl see know-TOT-PF they-DEMP1 see-pst placeDF

Spat V¹ V² V¹ Orecp V¹ V²
kùù fǒð ðag gewunâ, yééwú-ŋwǎ kùù kpáaŋ nìwà.
kùú fǒó-L ðag ge-wú-nà yéé-wú ɲwa kùú kpáŋ ni-wà
grandpa staffDF fall go-pst-pcple will-stat v.neg grandpa talk give-sub

“His grandchildren have seen and know, they saw the place that
grandpa's staff fell off to, they do not want to tell grandpa.”
s42:004

15) S^{pat} V¹ Cnj V¹ V² Adv
Búrām sùì nzáŋkíwú lô, cœe gewu wúrâ
Búrām sùì nzaŋ-ki-wú lô cœe ge-wú wúr- nâ
pers.n. house clean-TOT-stat when, descend go-past field.in

Cm adv S^{ag} V¹ Rel:[O^{pat} V¹]
ǎ Dàà yí kwεεáná dǒóŋ suurê.
ǎ dâà yí kwεε-a-ná dǒóŋ suu-rê
said maybe 1s find-into-irr sauce cook-v.detr

“When Buram’s house is all cleaned, **she goes down to the fields**, saying ‘Maybe I
shall find something to cook a sauce from.’”
s33:001

16) Sag V1 V2 LOC PP
Dùù ge jʉaŋ ɲu pôm waa jèè.
dùù ge jɪŋ ɲwi pôm waa jèè
hare go go.back 3s village wife at

"Hare returned to his village to his wife."
Txt1:006

17) S^{ag} V¹ V² LOC S^{ag} V¹ V² O^{recp}
Nǎm cεε juuŋasá tuunâ, fǎm dūù ráǎá ni mbêw .
Nǎm-L cεε juuŋ-a-sá tuu-nâ, fǎm dūù ráǎ-á ni mbéw-L
Hyena-DF descend return-into-down hole-in, uncle hare whisper-into give monkey-DF

cm V1 V2 V3 PP
à dú kwaŋw juùŋ cún ðirâ
ǎ dú kwaŋw juùŋ cún ði-râ.
said advance ascend return tree head-on.

“The hyena descended down into the hole again, uncle Hare
whispered to the monkey: Go climb up into the tree again!”
txt2:016

19) S^{ag} V¹ V² O^{pat} V^{1-sub}
Ndweëŋ laðŋ ge juuŋ yím nwààŋ bàðwà,
ndũñ-Pl laðŋ ge jiŋ yím nwààŋ bæ-wà
men DemPl go return medicine fight seek -to

S^{ag} V¹ V² O^{pat} V^{1-sub}
njeëŋ laðŋ ge juuŋ yéŋwtân pííŋwâ.
njân-Pl laðŋ ge jiŋ yéŋw-tàn pín –wà
women DemPl go return thing -eat make-subord.

“The men went home to find fight-medicine, the women went home to
make food.”
txt5:018

20) S^{em} cm Voc V¹ O^{pat} S^{ag} V¹ V²
Ŋuní ŋu mǎǎŋ lǎw à táá, kúmũ nùùŋ, yí díb juuŋrá.
ŋuní ŋwi mǎǎŋ lǎw ǎ táá kumũ nùùŋ yí díb jiŋ-râ
child 3s friend Dem said father speak" mouth log. exit retun-pst.detr.

“The child's friend said: Father, goodbye, I go back.”
txt4:016

22) S^{em} V¹ V²
Níná 666 yerakírâ.
níná 666 yera-ki-râ
baby cry.out begin-TOT-PFdetr.

“The Baby started to cry.”
s14g:03b

23) S^{ag} V¹ V² O^{pat}
S̃aŋ soo yerakírí nyààŋ.
S̃aŋ soo yera-ki-rí nyààŋ
prs.n. broil begin-TOT-PFtr animal

“Sang started broiling the meat.”
s14g:01b

24) S^{ag} V¹ O^{pat} Sub.V
S̃aŋ yerarí nyààŋ sòdòwà
S̃aŋ year-rí nyààŋ sòdò-wà
prs.n. begin-PFtr animal broil-sub

“Sang started to broil the meat.”
s14g:01a

25) S^{em} cm PP S^{ag} V¹ V² Foc O^{recp} Sub-v PP
Dùù à yí bàw, yí ge sífí kù wu maan nyiìŋwà , Sìŋw Ʒgòdò bàw,
Dùù à yí bàw, yí ge sífí-cí kù wu maan nyiìŋwà Sìŋw Ʒgòdò bàw,
hare said 1sg for 1sg go stay-hab foc. 2sg.mother / speak-sub-v fowl male for

Sag V1 Foc Orecp sub-V
ḃuũ gecí kù seghóó nyiìŋwà
ḃuũ-L ge-cí kù seghóó nyiìŋ-wà.
head-df go-hab foc mother.in.law speak-sub

“Hare said : As for me, it is I that constantly go to greet your mother, whereas for the Cock, it is the head who go to greet mother-in-law.”
Txt1:008

26) S^{ag} V¹ V² O^{pat} advI
Bũrãm ròd suŋ sífí zòd ḃuũ pí,
Bũrãm ròd suŋ sífí-cí zòd ḃuũ pí
pers.n baby drink stay-hab gruel good only

S V¹ V² advI
ròd gib baŋkíwú lèè,
ròd gib bááŋ-ki-wũ lèè
baby be.big be.beautiful-TOT-stat. so

S^{frc} O V¹ V² Neg
yéŋw gwàw Ʒu gwaw rèŋw-à fá.
yéŋw gwaw Ʒwi gwaw reŋw-wà fá
thing hurt 3s hurt arrange-neg not

“Buram's baby drinks only good gruel, the baby has grown so big and beautiful, sickness never makes him suffer.”
s30:003

27) S^{ag} V¹ V² O^{pat} advl
Kùù túr bakiwu ɲwî ďad.
kùú tur ba-ki-wú ɲwi ďad
grandpa rake finish-TOT-pst 3sg first

“Grandfather finished raking his first/early.”
s44:003

28) advl PP S^{pat} V¹ V²
Mún kùù wûr ndiɲ juû ďaa bakirā.
mún kùú wúr-L ndiɲ juú-L ďag ba-ki-rā
today grandpa field-df in weeds-df fall finish-TOT-PFdetr

“Today in grandfather's field, the juu-weeds have all fallen.”
s43:001

29) S^{ag} V¹ V² O^{pat}
Mi taɲ jɪŋkirí nyààŋ.
mi taɲ jɪŋ-ki-rí nyààŋ
1sg eat return-TOT-PFtr meat

“I went back to eating meat.”
txtmisc:004

30) S^{em} cm S^{ag} V¹ V² advl
Făm đùù ă năm wú mbêw yer jɪŋă nùùŋ sîm.
făm đùù ă năm-L wú mbêw-L yer jɸɸɸ-a-LH nùùŋ sîm
uncle hare said hyenaDF and apeDF begin reverse-into-imp how before

“Uncle Hare said : Hyena and Monkey should recommence as before.”
txt2:015

31) S^{ag} V¹ V² O^{pat} Loc
Ndún gìw túgá ni twâm ɓwanā,
Ndún gìw túg-á ni twâm ɓwanā,
man big spit-into give spittle hand-in

cm adv S^{ag} V¹ V² O^{recp} O^{pat}
à mún yí ní jɸɸɸri wú wân.
à mún yí ní jɸɸɸri wú wân.
said today log give return 2sg chief

“The old man spat saliva into the hand, saying today I give over to you the chieftainship.”
txt4:015

33) S^{frc} V¹ V²
Saarî see nzaŋkírã.
saarí-L see nzaŋ-ki-rã
morningDF be.red be.clear-TOT-past-detr.

“The morning grew bright.”
txt4:020

34)S^{ag} Adv V¹ V² V3 V4 O^{pat} Adv
Mbéw dâà kũm bæá tááŋ yee jíw cí ɲú cún yèè kónâ,
mbéw dâà kũm bæa táaŋ yee jíw-cí ɲu cún yèè kwééŋ -nâ
monkey one before seek eat change.loc. roam-hab 3s tree nut bush-in

Aux O^{pat} V¹ V²
ã năm̃ di kwεεkìwí.
ã năm-L di kwεε -ki-wí
aux hyena-DF come find -cmpl –past

“A monkey was roaming about in the bush looking for tree nuts to eat, when he came and found the hyena.”
txt2:004

35) S^{ag} V¹ V² V³ cm S^{ag} V¹ O^{pat} V¹ V²
Ŋuní viiŋ dib jɛuŋrê à yí ge yí mǎáŋ sóó kúkíwà
ɲuní viiŋ dib jiŋ-rê ǎ yí ge yí mǎáŋ sóó kú-ki-wà
child be.angry exit return-v.detr said 1sg go 1sg friend stab die-TOT-sub

S^{ag} O^{pat} V¹ V² V³ aux V¹ cmp:[
yáà yí róŋ wān ɓur dib jàùŋ, à kwéenà
yí-ǎ yí róŋ wān ɓur dib jiŋ à kwεε -nà
1sg-said 1sg saliva chief cut.open exit return aux find -participle

S^{pat} V¹ adj], S^{ag} V¹ Loc
sìi sááwú sóŋw ɲú mǎáŋ geri ɲú yêŋw.
sìi sáá-wũ sóm ɲwi mǎáŋ ge-rí ɲwi yéŋw
house be.left-past be.empty 3sg friend go-pst-tr 3sg thingDF

“The child angry went back saying I'm going to stab and kill my friend, I shall cut him up and get out again my chieftainship mucus; but he found the house left empty and the friend gone off.”
txt4:032

36)37) S^{ag} V¹ V² O^{pat} LOC
Búram tóó yírákíwú zòò ɓèrà̃m dǎà̃nà,
Búram tóó yír-a-ki-wũ zòò ɓèrà̃m dǎà-nâ
pers.n. ladle.up. fill-into-TOT-pst gruel bowl-dim other-in

V¹ O^{recp} S^{ag} aux V¹ -sub
nicí ɲú ròò, ròò á sùùŋwà.
ni-cí ɲwi ròò ròò á suŋ-wà
give-hab 3s baby baby aux drink-sub

“Boram ladles up gruel and fill it into another little bowl, gives her baby, the baby is drinking.”
s30:002

38)	S ^{pat}	V ¹	sbn	S ^{ag}	V ¹	Loc
	Zòò	tabkiwu	lô,	Búram	dúrkísáwú	ḡínā,
	zòò	tab-ki-wũ	lô	Búráṃ	du-r- kí- sa -wũ	ḡí-nā
	gruel	boil-TOT-pst as		prs.n	advance-objM-TOT- down-pst	ground-on
	V ¹	V ¹	V ^{2-sub}			
	yerauwu	tóó	kèṅwwà.			
	yera-wũ	tóó	keṅw-wà			
	begin-pst	spoon	cool-to			

“When the gruel has boiled, Boram puts it down on the ground and starts spooning it up to cool it.”
s30:001

39)	S ^{exp}	V ¹	V ²	cm	S-Aux	V ¹	adv	Q-pr
	Ŋu	táá	ké	sααṅkirē	à	wáá	ya	caṅw níkeèṅ?
	ṅwi	táá	kē	sααṅ-ki-rē	ǎ	wi-á	ya	càṅw ni-keèṅ
	3s	father	exist	awaken-TOT-v.detr	said	you-aux	change again	person-which

“His father was startled awake, saying who are you changed to again?”
txt4:025

40)	S ^{ag}	V ¹	V ²	O ^{pat}	advl	S ^{exp}	V ¹	V ²	adv		
	Burám	ròò	suṅ	síí	cí	zòò	ḡu	pí, ròò	gib	baṅkíwú	lèè,
	Burám	ròò	suṅ	síí	-cí	zòò	ḡu	pí, ròò	gib	bááṅ-ki-wũ	lèè
	prs.n.		baby	drink	spend-hab	gruel	good	only	baby	be.big	be.beautiful-TOT-stative so

S ^{frc}	O ^{pat}	V ¹	V ²	Neg	
yéṅw	gwàw	ṅu	gwaw	rèṅw-wà	fá.
yéṅw	gwaw	ṅwi	gwaw	reṅw-wà	fá
thing	hurt	3s	hurt	arrange-neg	not

“Boram's baby drinks only good gruel, the baby has grown so big and beautiful, sickness never makes him suffer.”
s30:003

41)

42)adv	S ^{pat}		V ¹	V ²	sbn	S ^{exp}	V ¹	Neg	
	Sàà	kùù	wúr	nzán	rèṅwkiwu	lô nyán	kùù	ké	jaa.
	sàà	kùù	wúr-L	nzaṅ	reṅw-ki-wũ	lô nyán	kùù	ke	jaa
	time	grandpa	field-df	clear	arrange-TOT-pst as	all	grandpa	know	not

“The time that grandfather's field had been properly cleaned up all together, grandfather doesn't know.”
s43:002

43) **adv S^{pat} V¹ adv V¹ V² V³**
Mún kùú gũr hérkíwú lèè, loo mgbee jìṅáwawu
Mún kùú gũr-L hér-kí-wú lèè, loo mgbee jìṅ-á-wa-wu
today grandpa feet-df lighten-TOT-pst so, run arrive return-into-away-pst

LOC sbn V¹ adv S^{pat} V¹ V² Neg V¹
póm lô haan-cí-ré pí, nyûr dib rèṅw-à fá, sókírâ.
póm lô haan-cí-ré pí, nyúr-L dib rèṅw-à fá, só-kí-râ.
village as pant-pres-v.detr only voice-df exit arrange-neg not, ?-TOT-pf.detr.

“Today grandfather’s feet has become all light, as he comes running
back to town he pants, the voice doesn’t come properly out,
burning(?).”
s39:001

44) **V¹ S^{ag} V¹ V²**
Mgbearê, móówu kwaw reṅwkirê,
Mgbee-a-rê, móó-wu kwaw reṅw-ki-rê,
arrive-in-v.detr. indf-pl greet arrange-TOT-v.detr.

V¹ V² O^{pat} S^{ag} V¹ V²
tííṅ ni sìì nùùṅ, bú-súúṅ-wu nuṅ sɛɛ-ki-rê.
tííṅ ni sìì nùùṅ, bú-súúṅ-wu nuṅ sɛɛkirê.
show give house sleep 3pl-aug-pl lie awaken-TOT-v.detr.

“Having arrived, people greeted properly, showed the sleeping hut,
they slept and awoke.”
txt5:006

45) **S^{em} cm S^{ag} V¹ O:RelS [S^{exp} V¹ V²**
Wân à yí yééwú ndwèéṅ nàw wú ṅwàm jǎṅw kecí
Wân à yí yééwú ndwèéṅ nàw wú ṅwàm jǎṅw kecí
chief said log will-stat man-pl person-pl with strenght fight know

O^{pat}] O^{cont.} cm S^{ag} V¹ adv
nwààṅ gɔɔṅ taara, à yí yééwú caṅw
nwààṅ gɔɔṅ taara, à yí yééwú caṅw
fight 10 3 said log will-stat again

O: RelS [S^{exp} V¹ V² O^{pat}] O^{cont.}
njéèṅ nàw pííṅ kecí yéṅwtâṅ lwám lwam góóṅ taara.
njéèṅ nàw pííṅ kecí yéṅwtâṅ lwám lwam góóṅ taara.
woman-pl person-pl make know food much much 10 3

“The chief said, I want 30 men, strong people, who know how to fight
a fight, and I also want 30 women, people who know how to make
lots and lots of food.”
txt5:014

48) **S^{ag} V¹ V² O^{pat} LOC**
Móówu swɛɛ yaanwú kùù kútô.
Móówu swɛɛ yaanwú kùù kútô.
indef-pl tease be.together grandpa there.

“They teased grandpa together there.”
s39:005

49) S^{ag} V¹ V² O^{pat}
Nitāŋw gbom yaαŋkí kùùkúú.
Nitāŋw gbom yaαŋkí kùùkúú.
People scoff.at be.together grandpa

“The crowd scoffed noisily at grandfather.”
s40:001

50) S^{fr} V¹ V² S^{exp} V¹ O^{pat} V^{2-sub}
Súúsùù jūŋnirā, kùù méécí ŋú wûr tûrwà.
súúsùù jīŋ -ni -rā kùú méé-cí ŋwi wúrDF tur-wà
early.rains go.back-give -PFdetr. grandfather think-pres 3s the.field rake.hay-sub

" The first rain have come back, grandfather thinks of cultivating his
field."
s37:002

51) S^{ag} V¹ V² O^{pat} Loc
Ndún gìw túgá ni twâm ôwanâ,
Ndún gìw túg-á ni twâm ôwanâ,
man big spit-into give spittle hand-in

cm adv S^{ag} V¹ V² O^{recp} O^{pat}
à mún yí ní jūŋri wú wân.
à mún yí ní jūŋri wú wân.
said today log give return 2sg chief

“The old man spat saliva into the hand, saying today I give over to you
the chieftainship.”
txt4:015

52) S^{em} V¹ V² O^{recp} cm S^{ag} V¹ V² V³
Năm gan ni mbêw à mí gě yεε jíwcírê
Năm gan ni mbéw-L à mí gě yεε jíw-cí-rê
hyena say give monkey-df said 1sg go change roam-hab-v.detr.

S^{pat} Aux Loc V¹
maà tuunâ dagàkíwí.
ma-à tuú-nâ dag-à-kí-wí.
1sg-aux hole-in fall-into-TOT-pst.

“The hyena said to the monkey saying I was ambling about when I fell
into the hole.”
txt2:006

53)54) S^{ag} V¹ pp
Kùù mgbábkírí wú Búrám
Kùù mgbáb-kí-rí wú Búrám
grandpa join-TOT-PFtr. with prs.n.

cm V¹ V² O^{ben} O^{pat}
à déṅw nĩ yì mvúú dǎñì
à déṅw ni-L yì mvúú dǎñì
said brew give-imp log beer cultivation-df

S^{ag} aux O^{ben} O^{pat} V¹ V²
nitaṅw ǎ kùú juú fúmki nì.
nitaṅw ǎ kùú juú-L fúm-kí nì.
ind.pron-pl aux grandpa weeds-df cut-TOT give.

“Grandfather joined with Buram saying 'brew me cultivation beer' so that the guys will clear out the juu-weeds for him.
s38:003

55) S^{ag} V¹ V² O^{pat} adv PP V¹ V²
Nàw kipôm ka ge ɓuro wân jèè, wú wân nyin yɛɛkirê.
nùì-Pl kí- pôm-L ka ge ɓwi-ro wân jèè wú wân nyin yɛɛ-ki-rê
they ana-villageDF take go 3pPl-ana chief at with chief speak change-TOT-v.detr

“The people of that village brought them to the chief's (place), to exchange speech with the chief.”
txt5:007

56) S^{em} V¹ V² O :ReIS [V¹]
Fǎm dūù sweɛɲ toowu yéṅw pínwúnâ.
Fǎm dūù sweɛɲ toowu yéṅw pínwúnâ.
uncle hare ask follow-pst thing do-pst-pcpl

“Uncle Hare asked what exactly had happened.”
txt2:013

57) V¹ V² adv CNJ S^{ag} V¹ CM S^{frc} V¹
Yeg yɛɛkiri wú cwáá lô, nǎm kpááɲná à yóóɲ lóɲwɛí
yeg yɛɛ-ki-ri wú cwáá lô nǎm-L kpááɲ-ná ǎ yóóɲ lóɲw-cí
separate change-TOT-PF with death since hyenaDF talk -past CIT hunger bite-hab

O^{pat} S^{ag} V¹ O^{pat} V^{2-sub}
yí, yí yééwú mbêw tààɲwà.
yí yí yéé-wũ mbêw tɔɔɲ -wà
1s 1s will-stat apeDF eat -to

“Then having changed to be separated from death, the hyena said hunger bites me, I want to eat the monkey.”
txt2:010

59) S^{pat} V¹ V² Sbn V¹ V² adv
Kòm làw cεε jεεŋsáriwu lô dag ndónáwa nílàw nùùŋnà
kòm làw cεε jiŋ-sa-ri-wũ lô dag ndón-a-wa nìi-lâw nùùŋ-nâ
tree.sp. Dem descend return -down-to-pst as fall pass-into-from person-Dem mouth-in

PP

wú cằcằcằ nyáŋ,
wú cằcằcằ nyáŋ
with branches all

S^{ag} V¹ O^{pat} V¹ V²
nílàw reŋwki ŋu nùùŋ búúŋ jiŋkiré.
nìi-lâw reŋw-ki ŋwi nùùŋ búúŋ jiŋ -ki-ré
person-Dem work-TOT 3s mouth close return-TOT-v-detr

“As the kom came back down again, it fell and entered into that
man's mouth with branches and all, he worked his mouth and
closed it up again.”
txt5:032

60) Loc? V¹ V² O^{pat} S^{pat} V¹ V²
Mbân cĩŋw yεεcí ŋgónî fǒð ké dagakíwawú
Mbân cĩŋw yεε-cí ŋgónî fǒð ké dag-a-kí-wa-wú
place jump change-pres dance staff jerk fall-into-TOT-away-pst

Loc adv S^{ag} V^{1-mod} V^{1-sub} V¹ adv
semnâ rêw, kùú nùùŋ yerarí búúŋwâ, keŋwcíríré dí.
sem-nâ rêw, kùú nùùŋ yer-a-rí búúŋ-wâ, keŋw-cí-rí-ré dí.
grass-in id.ph grandpa mouth begin-into-PFtr close-sub cool-pres-prog-v.detr.

“The place he jumps around the dance, the staff suddenly fell away into
the grass, and **grandfather's mouth started diminishing**, he is
definitely cooling down!”
s42:002

61) S^{pat} V¹ adv S^{ag} Rel:[V¹ Neg ana]
Kòm tííṅ gìw dāà nyínwú wān díṅnā, nìi nwààṅ njéwā fā lâw
kòm tííṅ gìw dāà nyín-wú wān díṅ-nā nìi nwààṅ njéw-à fá lâw
tree.sp. trunk big one stand-stat. chief yard-in person fight tire.of -not not Dem.

V¹ V¹ O^{pat} adv^{instr} V¹
yúúwaré, ðugkí kòm tííṅ lâw wù ðwáá mum, subkiré,
yúú-wa-ré ðug-ki kòm tííṅ lâw wú ðwaa mum sub-ki-ré
rise-from-v.detr grip-TOT tree.sp. trunk Dem with hand one tear.up-TOT-v.detr

V¹ V² S^{pat} V¹ V² adv
mbúú kwanwré, kòmcún lâw múúṅ ran-áwa gúúṅninā.
mbúú kwanw-ré kòm-cún lâw múúṅ ran-a -wa guuṅni-nā
throw ascend-v.detr tree.sp.-big Dem disappear vanish-into-from sky-in

“A great kom-tree was standing in the chief’s yard. This man who didn’t tire of fight, rose up, gripped that kom-tree with one hand, tore it up with the roots, threw it upwards, **the big kom-tree vanished away into the sky.**”
txt5:029

62) V¹ O^{pat} S^{pat} V¹ V² Loc
Gonkiri ṅú yéṅw, cam ləərí-L sṳ́ṳ tamakírí ḃágrinā
Gon-ki-ri ṅú yéṅw, cam ləərí-L sṳ́ṳ tam-a-kí-rí ḃágri-nā
drink-Tot-PFtr 3sg thing finger 6th-df entangle be.solid-into-TOT-PFtr clothes-in

S^{pat} V¹ V¹ adv S Neg^{pred}
ṅwiṅ hérkírā, haančíré pí, ṅwàm fá jàà.
ṅwiṅ-L hér-kí-rā, haan-cí-ré pí, ṅwàm fá jàà.
body-df be.light-TOT-Pfdetr. pant-pres-v.detr only, force not anymore

“ Drinking his fill, his 6th finger got solidly caught in his clothes, his body became all light, he was panting only, there was no more strength.”
s43:003

7 ANALYSIS OF THE 3- AND 4-VERB CHAINS: EXAMPLES

65) S^{ag} V¹ V² V³ O^{pat} RelS: V¹ O^{cont.}
Dùù ka jũũṅ ni ndushò sɛɛkiwuré mum,
Dùù ka jũũṅ ni ndushò sɛɛ-ki-wu-ré mum,
hare take return give eggplant ripe-TOT-stat-v.detr one

aux V¹ RelS: S^{pat} aux Pred.
à kwéènà ndáṅndeè á lim.
à kwéè-nà ndáṅndeè á lim.
aux find-pcpl spider aux sleep

“Hare brought back one ripened eggplant, finding Spider sleeping.”
txt7:011

66) S^{ag} V¹ V² V³ O^{pat} Loc
Móówu pan ge juuηwú kùù póm.
Móó-wu pan ge juuη-wú kùù póm.
indf.-pl carry go return-pst grandpa village

“They carried grandfather back to his village.”
s43:004

67) V¹ V² V³ O^{pat} App:[Gen. N]
Ge kwεε juuη ηu móάη nìì taηwcún lâw ηũn.
Ge kwεε juuη ηu móάη nìì taηwcún lâw ηũn.
go find return 3sg friend person great dem child

“ft He went and found again his friend, the child of that old man.”
txt4:017

68) S^{ag} relS: [S^{ag} V¹ aux V¹ PP]
Nàw wân terwuná à jâηw wú nìlàw
Nàw wân ter-wu-ná à jâηw wú nì-làw
people chief choose-pfv-pcpl aux fight with person-dem

V¹ V² V³ PP relS: [S^{ag}
loo déb taαkiré wú nàw
loo déb taα-ki-ré wú nàw
run have.diarrhoea disperse-v.detr. with people

adv V¹ O^{pat} V^{1-sub}] rel
kũm diwu nwààη swiìηwà lαάη nyáy.
kũm diwu nwààη swiìηwà lαάη nyáy.
just come-pfv fight see-sub demPl all

“The men that the chief had chosen to fight with this man ran off with diarrhoea, in all directions, together with all those who just had come to watch the fight.”
txt5:035

69) S^{em} V¹ adv O^{recp} cm V¹ S^{ag} V¹ V² V³ O^{pat}
Mbêw swεεη caηw nãm` à súnà yí ká dib δεεkírí wú
Mbêw swεεη caηw nãm` à súnà yí ká dib δεεkírí wú
monkey-df ask again hyena-df said see-pcple log take exit rescue-PFtr 2s

sbn S^{ag} O^{pat} V¹ Neg qp
yéε waà yí tαάη-ηa rá?
yéε waà yí tαάη-ηa rá?
if 2s-aux log eat-neg qp

“Monkey asked the Hyena again saying, in case I lift you out and rescue you, you will not possibly eat me?”
txt2:007

70) S^{ag} V¹ PP cm V¹ V² V³ O^{ben} O^{pat}
Kùù géwu Búrám jèè à yúú yάάη nĩ yì tútòηw wûr,
Kùù gé-wu Búrám jèè à yúú yάάη ni-L yì tútòηw wúr-L,
grandpa go-PF prs.n. at said work(v) be.together give-imp log. work(n) field
S^{exp} V^{mod} O^{pat} V^{1-sub}

yí yééwú nítaŋw mwáwwā.
yí yéé-wú nítam-pl mwáw-wā.
log will-PF people hire-sub

“Grandfather went to Buram saying Work together with me on my field-work, I want to hire people”
s37:005

73) V¹ V² V³ O^{pat}
Goo tènki se yí ɓuû,
Goo tèn-kí se yí ɓuú-L,
chop sever-TOT see log head

aux O^{recp} V¹ V² V³ adv
à yí seghóó gè nyin ni càŋw.
à yí seghóó gè nyin ni càŋw.
aux log mother.in.law go speak give again

”Try chop entirely off my head, so that (it) will go to greet my mother-in-law.”
txt1:009

74) S^{em} cm S^{ag-voc} V¹ V² S^{ag} V¹ O^{pat}
Nìi nwààŋ à díwu di sériré yí yérǎ nwààŋ.
nìi nwààŋ ǎ díwu di se -ri-ré yí yera nwààŋ
person fight said 2pl come see-hither-v.detr 1pl begin fight

“The fighter said you seem to have come, so let us start the fight!”
txt5:034

75) S^{ag} adv V¹ V² V³ V⁴ O^{pat} Loc
Mbéw dāà kǔm báǎ táǎŋ yee jíwci nú cún yèè konā,
Mbéw dāà kǔm báǎ táǎŋ yee jíwci nú cún yèè konā,
monkey other while seek eat change roam-pres 3s tree fruit bush-in

aux O^{pat} V¹ V²
ā nǎm di kwεεkiwí.
ā nǎm di kwεεkiwí.
aux hyena-df come find-TOT-pst.

“A monkey who just then was roaming about seeking his tree nuts in the bush, came and found the hyena.”
txt2:004

76) S^{ag} rel:[V¹ V² Neg] V¹ V² V³ V⁴
Nìi taŋ fùùà fá lâw nyín da shiw tamkí
nìi taŋ fuu -à fá lâw nyín da shiw tam -ki
person eat be.satisfied-? not this stand stand.legs.apart be.strong be.solid-TOT

Adv V¹ V² O^{pat} V¹ O^{pat}
lɔɔŋ, haan díikí nùùŋ, ɓwaŋwci kòm làw.
lɔɔŋ haan díi -ki nùùŋ ɓwaŋw-cí kòm làw
well yawn leave-TOT mouth wait -pres tree.spec. that

“The man who was not satisfied by eating, planted solidly his feet

squarely apart, opened wide his mouth, and waited for the kom.”
txt5:031

77) **S^{ag}** **V¹** **V²** **V³** **V⁴**
Nyààŋ gàw wú nyààŋ ceraarî nyáŋ du kwaŋw ge barâ.
Nyààŋ gîw-pl wú nyààŋ ceram-pl nyáŋ du kwaŋw ge ba-râ.
animal big-pl with animal little-pl all advance ascend go finish-Pfdetr.

“All the big animals and the small animals ascended and left to the very last one.”
txt7:006

APPENDIX B

The 5 tables below present all the verb chains of the corpus, grouped by framing event type, and subdivided by co-event type.

Table B - 1 **Motion chains**

<i>Nr.</i>	<i>Co-event</i>	<i>Chains (word-by-word-translation, complete sentence and free translation)</i>
1	Enablement	<p>yáú dibwuré, gewú /LOC rise exit-pst-v.detrans. go-pst/ village other-in Saarí dàà, búúúúwu yáú dibwuré, gewú gbiín dààà. One day, they <u>rose and went out, and went to another village.</u> txt5:005</p>
2	Enablement	<p>AUX/O^{pat} /gur dîi 2sg-aux /maise bowl ten / buy keep-imp. Wàà lúgùù sòw jér gur dîi. You <u>are to buy and keep 10 bowls of maise.</u> txt6:004</p>
3	Cause	<p>ból yáákí /O^{recp} / LOC call be.together-TOT / people/ his yard-in Nàró fàà wàn ból yáákí nítàw ndwèè wú njèè nyán nù dínà. Behind them the chief <u>called the people, both men and women, together in his yard.</u> txt5:013</p>
4	Cause	<p>ból yáákí /RECP call be.together / people Saarî seeki lô, shwáá wàn ból yáákí nítàw, ndwèè gòw taara lãà diré nyéékíwaré, njèè gòw taara lãà di cawré nìkèè nyán díwu wú yéwátà lwám lwam. When the dawn had come, very early the chief called together the people, the 30 men came and took their stand, the 30 women also came, each and every one came with great amounts of food. txt5:019</p>
5	Cause	<p>cim kwanwkiré jump ascend-cmpl DeTr Dùù gbîñ ténkiré, Dùù <u>cim kwanwkiré</u>, dag jũũsaré, sũnkíré nad-nad, Dùù kúkúré, waa booaré.</p>

		Hare's neck was cut, Hare <u>jumped into the air</u> , fell back down again, batted flap-flap, Hare was dead, the wife yelled. txt1:011
6	Cause	cĩw yēcí/PAT jump change.loc-pres./dance-DF Mbân cĩw yēcí ngóhî fǝ́ ò ké dagakíwawú semná rēw, kùú nùñ yerarí búúñwā, keñwecíríré dí. The place he jumps around dance, the staff suddenly slips off and falls away into the grass, and grandfather's mouth started diminishing, he is definitely cooling down! s42:002
7	Cause	đii juuṇakíwú /O^{pat} /LOC put back-into-TOT-pst/his head/ wing-under Sĩw Ìgǝ́ ðii juuṇakíwú ṇú buú tigàwnā. Cock had put his head in under his wing again. txt1:003
8	Cause	đii kwanwki / O^{pat} /LOC put ascend-Completive Dùu nuṇsaré, <u>đii kwanwki gbîñ cún gwārā</u> waa kari dēw gooasá Dùu gbîñ ndiñ, kpép! Hare lay down, <u>lifted his neck onto a log</u> , his wife carried the machete over and hacked down into Hare's neck, clack! txt1:010
9	Cause	ka ge / O^{pat} /LOC take go / 3pl-earlier ref. /chief at Nàw kipôm <u>ka ge</u> búro wân jèè, wú wân nyin yeekiré. The people of the village <u>brought them to the chief's (place)</u> , to exchange greetings with the chief. txt5:007
10	Cause	kúú ðiikisáwú/O^{pat} die leave-TOT-down-pst/3pl Ìwēē ḡaara lǝ́ ò táá bú ú maan <u>kúú ðiikisáwú búro</u> . The two children, their father and their mother <u>died and left them alone</u> . txt5:001
11	Cause	mbúú kwanwré throw ascend-v.detrans. Kòm tíñ gíw ðàa nyínwú wân dínā, nì nwàñ njéwā fā lāw yúúwaré, buḡkí kòm tíñ lāw wù ḡwáá mum, subkiré, <u>mbúú kwanwré</u> , kòmcún lāw múú ranáwa gúúñnā. A great kom tree stood in the chief's yard, the man never tiring of fight rose up, gripped that kom trunk with one hand, tore it up, and <u>threw it upwards</u> , the big kom disappeared vanishing into the sky. txt5:029
12	Cause	pan dibkí / O^{pat}

		<p>carry go.out-der</p> <p>Mbêw dīasá ɲú kpǎŋ̀ tùú nùùŋ̀nà, nǎm̀ zǎá kwan̄ki ḱíníŋ, mbêw pan dīb̄kí nǎm̀.</p> <p>The monkey put his tail down in over the hole's edge, the hyena dangled upwards with it, the monkey <u>lifted out the hyena</u>.</p> <p>txt2:009</p>
13	Cause	<p>túú dībri / O^{pat}</p> <p>cough go.out-hither / mucus</p> <p>Ndún g̀ìw túú dībri róòŋ, dīíáwa ɲuní ɲu mǎáŋ bwanà à múùkìrè.</p> <p>The old man <u>coughed up mucus</u>, put it into the friend of the child's hand and said Swallow it!</p> <p>txt4:013</p>
14	Cause	<p>vwáw suŋǎ / O^{pat}</p> <p>snort drink-into / the water</p> <p>Kùù vííŋkíwú kwàm, ɲulàw ndóóŋ jìŋawu ɲú sìnà ðunkiwu ɲú cèŋw, vwáw suŋǎ ním̄.</p> <p>Grandfather seethed with anger, he reentered into his house, closed his door, then <u>snorted into his water while drinking</u>.</p> <p>s40:002</p>
15	Concomitance	<p>AUX/ḃḃḃ gè-wà</p> <p>aux /cry /go-sub</p> <p>Kùù kí yí jìŋ wú fààŋ, á ḃḃḃ gèwà.</p> <p>Grandfather returns at full speed, <u>crying as he runs</u>.</p> <p>s38:005</p>
16	Concomitance	<p>ḃḃḃ mgbecáwawu/loc/adv/conj</p> <p>cry arrive-into-away.from-pst/village/so/as</p> <p>Nùùŋ kùù ḃḃḃ mgbecáwawu póm lèè lò, à yí séwú pǎaŋ gír ðàà zaŋcírè bóŋnà.</p> <p>As in this way grandfather <u>cried so much arriving into town</u>, saying I've seen some sort of stone stirring in the river!</p> <p>s39:001</p>
17	Concomitance	<p>zí gewu /loc</p> <p>be.numerous go-Past / to.the.river</p> <p>Nàró zí gewu bóŋnà à kwéè̀nà á mgbááŋ.</p> <p>They <u>went numerous to the river</u> finding that it was a hippopotamus.</p> <p>s39:004</p>
18	Constitutiveness	<p>ḃag gewunâ</p> <p>grandfather staff /fall go-past-part.</p> <p>Ŋu wààwu se kekírâ, ðulàŋ sewu mbân kùù fòḃ ḃag gewunâ, yééwú ɲwǎ kùù kpááŋ nìwà.</p> <p>His grandchildren has seen and knows, they saw the place that grandfather's staff <u>fell off to</u>, they do not want to tell grandfather.</p> <p>s42:004</p>
19	Constitutiveness	<p>Kag kwan̄wkì / O^{pat} / loc</p> <p>bind ascend-TOT-Imp.</p>

		<p><u>Kag kwanwki gágrí ram sù yèènnà, sìnw à 63on kiniŋ kírà.</u> Attach a little basket up on the side of the house, the hens will lay their eggs in it. txt6:005</p>
20	Manner	<p>ɗag ndónáwa/ loc fall pass-into-from/that.person mouth-in Kòm làw cee juuŋ sáriwu lô ɗag ndónáwa nilàw nùùnnà wú cǎà cǎà nyán, nilàw reŋwki ɲu nùùŋ búúŋ jínkiré. As the kom came back down again, it <u>fell and entered into that man's mouth</u> with branches and all, he worked his mouth and closed it again. xtt5:032</p>
21	Manner	<p>ɗag juuŋsa rē fall reverse-downwards-v.detrans. Dùù gbíŋ ténkiré, Dùù cim kwanwkiré, ɗag juuŋsaré, súŋkiré nad-nad, Dùù kúkúré waa 6ooaré. Hare's neck was cut, Hare jumped into the air, <u>fell back down again</u>, batted flap-flap, Hare was dead, the wife yelled. txt1:011</p>
22	Manner	<p>gē gwa nyàà-wà go-imp sit.down rest-sub.v. Wàn à yí wárá, díwu gē gwa nyààwà. The chief said, I understand, <u>go sit down and rest</u>. txt5:012</p>
23	Manner	<p>AUX/6úú juuŋsǎri-wà kom/.treeDF/noise/aux/swish return-hither-sub. Ced fá nàró à wáána kòm gíw cún cèèŋ á 6úú juuŋsǎriwà. Not a moment after they heard the noise of the big kom-tree <u>as it sounded back downwards again</u>. (medan det susa nedover att) txt5:030</p>
24	Manner	<p>ké ɗagakíwawú / loc jump fall-into-TOT-from-Past /in.the.grass Mbàn cǐŋw yeeí ngóni fòò ké ɗagakíwawú semná rēw, kúú nùùŋ yerarí búúŋwà, keŋwcíríré dí. The place he jumps around dance, the staff <u>suddenly fell away into the grass</u>, and grandfather's mouth started diminishing, he is definitely cooling down! s42:002</p>
25	Manner	<p>loo yaáŋriré run assemble-towards-detr Nitàŋw loo yaáŋriré à kwèènnà Dùù 6uú gwεεwu díŋ ɲwiíŋ gwεεwu díŋ, kúkírà. People <u>came running to</u>, finding Hare's head lying a part, his body lying a part, dead. txt1:012</p>

26	Manner	záá kwanwki /PP swing ascend cmpl /loc/instr Mbêw díiasá nù kpǎṅ tũú nũũṅnà, nǎm` záá kwanṅki kínin, mbêw pan dibkí nǎm`. The monkey put his tail down in over the hole's edge, the hyena <u>dangled upwards with it</u> , the monkey lifted out the hyena. txt2:009
27	Pleonasm	juuṅ nirá reverse give-past-detr Súúsũũ juuṅnirá, kũũ mééécí nù wũr tũrwà. The first rains <u>have returned</u> , grandfather thinks of cultivating his field. s37:002
28	Pleonasm	cɛɛ gewu / loc descend go-pst/to.the.field Búrám sũ nzáṅkíwú lô, cɛɛ gewu wúrá ǎ Dàà yí kwɛɛáná dǒóṅ sũũrê When Buram's house is all clean, she <u>descends to the field</u> saying Maybe I shall find something for sauce-cooking. s33:002
29	Pleonasm	cɛɛ juuṅ sáriwu /CONJ descend go.back downwards-hither-pst /conj Kòm làw cɛɛ juuṅ sáriwu lô dag ndóṅáwa nilàw nũũṅnà wú cǎà cǎà nyáṅ, nilàw reṅwki ṅu nũũṅ búúṅ jĩṅkiré. As the kom <u>came back down again</u> , it fell and entered into that man's mouth with branches and all, he worked his mouth and closed it again. txt5:032
30	Pleonasm	cɛɛ juuṅasá / loc descend go.back / LOC Nǎm cɛɛ juuṅasá tuunâ, fǎm dũũ róáá ni mbêw à dú kwanṅw juuṅ cún bírá. The hyena <u>descended down into the hole again</u> , uncle Hare whispered to the monkey: "Go climb up into the tree again!" txt2:016
31	Pleonasm	díb juuṅrá exit go.back-PFdetr Ŋuní ṅu mǎáṅ làw à táá kúmũ nũũṅ yí díb juuṅrá. The child's friend there said Father, goodbye, I <u>go back</u> . txt4:016
32	Pleonasm	ge juuṅ / loc go reverse.action / his village Dũũ ge juuṅ ṅu póm waa jèè. Hare <u>went back to his village</u> to his wife. txt1:006

VERB CHAINS IN NIZAA

33	Pleonasm	<p>ge juuŋ / O^{pat} / bààwà go go.back /medicine fight / seek-subordin.v. Ndwèèŋ lǎàŋ ge juuŋ yím nwààŋ bààwà, njeèŋ lǎàŋ ge juuŋ yéŋwtâŋ pííŋwà. The men <u>went home to find fight medicine</u>, the women went home to make food. txt5:018</p>
34	Pleonasm	<p>ge juuŋ / O^{pat} / pííŋwà go /go.back /thing-eat / make-subordin.v. Ndwèèŋ lǎàŋ ge juuŋ yím nwààŋ bààwà, njeèŋ lǎàŋ ge juuŋ yéŋwtâŋ pííŋwà. The men went home to find fight medicine, the women <u>went home to make food</u>. txt5:018</p>
35	Pleonasm	<p>gé juuŋ/ loc go back / his village Dib ndoŋrê, kǎ fààŋ mǎàŋ dib ndoŋwú caŋw ŋu yeŋw, gé juuŋ ŋu póm. He went off, behind him the friend also went off on his way, <u>going back to his village</u>. txt4:023</p>
36	Pleonasm	<p>ndóŋ jìŋawu/ loc enter reverse-into-Past / his house-loc Kùù vííŋkíwú kwàm, ŋulâw ndóŋ jìŋawu ŋú sìnà òŋkiwu ŋú cèŋw, vwáw suŋǎ ním. Grandfather seethed with anger, he <u>reentered into his house</u>, closed his door, then snorted into his water while drinking. s40:002</p>
37	Pleonasm	<p>yáàŋ yáàŋkíwú / loc assemble assemble-TOT-Pst/grandpa/at Nitâŋw yáàŋ yáàŋkíwú kùù jèè pííŋa, nàró mééwúná à árí kéé. Lots of people <u>gathered by grandfather</u>, they thought that this was truth. s39:003</p>
38	Subsequence	<p>dib ndoŋrê exit pass-v.dtr. Tùrrâ òùù dib ndoŋrê ge wúr ndúshònà taŋ baki sàè ndushò nyáŋ. In the night Hare <u>exited</u>, went to the eggplant-field and ate up all of the mother-in-law's eggplants. txt7:010</p>
39	Subsequence	<p>Dib ndoŋrê exit passPF –v.detrans.ans. Dib ndoŋrê, kǎ fààŋ mǎàŋ dib ndoŋwú caŋw ŋu yeŋw, gé juuŋ ŋu póm. <u>He went off</u>, behind him the friend also went off on his way, going back to his village. txt4:023</p>
40	Subsequence	<p>dib ndoŋwú /adv/ loc</p>

		go.out pass-pst / also / his thing Dib ndonrê, kǎ fààn mǎ́ǎ́ dib ndonwú canw ɲu yenw, gé juun ɲu póm. He went off, behind him the friend <u>also went off on his way</u> , going back to his village. txt4:023
41	Subsequence	Mwáw ndónwú /Adv / O^{pat} hire pass.by-Past / again /personal.name <u>Mwáw ndónwú canw Sâɲ</u> à gé nǐ yí nyààɲ taa nìwà. He <u>passed hiring Sang again</u> , saying Go for me to shoot me some meat. s40:005
42	Subsequence	nyín dibkíwaré (x2) stand.up go.out-TOT-from-v.detrans.. Ndwèèɲ gɔɔɲ taara nyín dibkíwaré, njèèɲ gɔɔɲ taara <u>nyín dibkíwaré</u> , nàw sáádĩ tǎǎkiré. Thirty men <u>stepped forth</u> , thirty women <u>stepped forth</u> , the rest dispersed. txt5:015
43	Subsequence	nywáw juunǎwawu / loc disappear go.back-into-away-past / loc Fám ðùù <u>nywáw juunǎwawu</u> kwééɲ ndààɲ ndéɲw, nǎm` sáákírí ɲúró mum pí kí tuunâ. Uncle Hare <u>disappeared back</u> into the bush, and the hyena stayed him alone only in that hole. txt2:017
Co-event frequencies:		
	Precursion	0
	Enablement	2
	Concomitance	3
	Cause	12
	Manner	7
	Constitutiveness	2
	Subsequence	6
	Pleonasm	11
	Total	43

Table B - 2 Temporal Contouring chains

Nr.	Co-event	Chains, with word-by-word- translation, complete sentence and free translation
1	Constitutiveness	ḡḡ yerakírā. cry.out /start-TOT-PFDetr Níná ḡḡ yerakírā. The Baby started to cry.
2	Constitutiveness	ḡur yerakírí / O^{PAT} dress/start-TOT-PFtr. Sāṇ ḡur yerakírí nyààṇ. Sang started to cut up the animal.
3	Constitutiveness	soo yerakírí / O^{PAT} broil/start-TOT-PFtr/ meat. Sāṇ soo yerakírí nyààṇ. Sang started to broil the meat.
4	Constitutiveness	ge sícǐ /FOC/RECP-1/nyìṇ-wà go-habitual-hab /foc / your.mother / greet-sub-v Dùù à yí bàw, yí ge sícǐ kù wu maṇ nyìṇwà, Sìṇw Ṇgòò bàw, ḡuá gecí kù seghóó nyìṇwà. Hare said:as for me, it is I that constantly go to greet your mother, whereas for the Cock, it is the head who go to greet mother-in-law.
5	Constitutiveness	suṇ sícǐ /O^{PAT} drink do.habitually-hab / gruel good Burām ròò suṇ sícǐ zòò dūu pí, ròò gib baṅkíwú lèè, yéṇw gwàw ṇu gwaw rèṇw-wà fá. Boram's baby drinks only good gruel, the baby has grown so big and beautiful, sickness never makes him suffer.
6	Constitutiveness	taṇ jìṅkírí / O^{PAT} eat return-TOT-PFtr meat Mi taṇ jìṅkírí nyààṇ “I ate meat again.” txtmisc:004
7	Constitutiveness	S^{PAT} /shwáṇw bakirā river / dry finish-cmpl /pst-v.detrans. Á féeṇ ndààṇ-ndéṇw, ḡōṇ shwáṇw bakirā. It was in the middle of the dry season, the rivers were all dried up.
8	Constitutiveness	taṇ baki/ O^{PAT} /

		eat finish-TOT/ eggplant all/ Tùrrâ dũu dib ndoŋrê ge wúr ndúshònà <u>taŋ baki sèè ndushò nyán</u> . In the night Hare exited, went to the eggplant-field and ate up all of the mother-in-law's eggplants.
9	Constitutiveness	twééŋ bakiwu / O^{PAT} swear finish-cmpl-past / all.the.oaths.in.the.world Nám twééŋ bakiwu swééŋ dǎǎŋnà nyán à yí nǔ tǎŋ-à fá. Hyena swore all the oaths in the world, saying he would not eat him.
10	Constitutiveness	kpááŋ bakiwu / O^{PAT} speak finish-tot-past/all Mbêw <u>kpááŋ bakiwu nyán</u> monkey told him everything.
11	Constitutiveness	ni jũũŋri/RECP/PAT give return-hither / you /chieftainship Ndún gǐw túgáni twám ðwanà, à mún yí níjũũŋri wú wàn. The old man spit saliva into the hand, saying today I give over to you the chieftainship.
12	Constitutiveness	yééwú/RECP/PAT-2/ni jũũŋ-wà want.to/childDF/chieftainship/give back-subord. Nidǎà yééwú núní wàn ni jũũŋwà. A person wants to transfer his chieftainship to his child.
13	Constitutiveness	yééwú /RECP /PAT-2 /ni jũũŋ-wà want-stat/you/chieftainship/give rev.-act.-sub. Ndún gǐw làw à yí nǔrkírǎ, yí bógríwu wú lǒ, yí yééwú wú wàn ni jũũŋwà. The old man said, I have become old, that is why I called you you hither, I want to give the chieftainship over to you.
14	Pleonasm	yer jǐŋǎ /PP start go.back-PRF-der-infl /PP Fám dũu ǎ nám wú mbêw <u>yer jǐŋǎ nũũŋ sǐm</u> . Uncle Hare said : Hyena and Monkey should recommence as before.
15	Manner	S^{PAT}/ǎǎ baki-rǎ fall-pl finish-TOT Mún kũu wúr ndiŋ juũ ǎǎ bakirǎ. Today in grandfather's field, the juu-weeds have all fallen.
16	Cause	túr bakiwu/ O^{PAT} rake finish-Past / (3p-L)Poss.Pro Kũu <u>túr bakiwu ŋwǐ ǎǎ</u> . Grandfather finished raking his early.
17	Cause	Tǔ yéé-kǐ /ADV/PAT

build be.first-tot-imp. /first/hencoop big
 Tɔɔ yɛkì nú kuù gîw.
 Plait first a big hencoop.

Table B - 3 **State change chains**

<i>Nr.</i>	<i>Co-event</i>	<i>Chains, with word-by-word- translation, complete sentence and free translation</i>
1	Cause	ge/PAT / sós /kúkíwà go /my friend / stab / die-TOT-subordi.v. ʔuní viiŋ dib jʊŋrɛ̀ à yí ge yí mááŋ sós kúkíwà yáà yí rósŋ wān ɓur dib jùùŋ, à kwéénà sɪ̀ sááwú sóŋw ɲú mááŋ geri ɲú yêŋw. The child angry went back saying I'm going to stab and kill my friend, I shall cut him up and get out again my chieftainship mucus; but he found the house left empty and the friend gone off. txt4:032
2	Cause	NP-RelS: PAT-1 /taŋ fùùà fá food / eat be.satisfied-subordin.v. /NEG Wān ganni njeɛŋ lɔ̀ɔŋ ǎ nɪ̀ yéŋwtāŋ taŋ fùùà fá díwuré yééwú yéŋwtāŋ taŋ fùùwà, kocùn díwu karɪ̀ yéŋwtāŋ lwam ɓítè. The chief said to the women that a person who is never satisfied by eating food has come, he want to eat to his satisfaction, tomorrow you bring much food here. txt5:017
3	Cause	PAT-1 /taŋ fùùà /NEG food / eat satisfy-subord.v. /neg Nɪ̀ tòwwâ à yí bàw yí yéŋwtāŋ taŋ fùùà fá. The follower said as for me, I am not satisfied by eating food. txt5:011
4	Cause	se kekirā see know-TOT-Past-DeTr ʔu wààwu se kekirā, ɓulɔ̀ɔŋ sewu mbān kùù fòò ɗag gewunâ, yééwú ɲwā kùù kpááŋ nìwà. His grandchildren has seen and knows, they saw the place that grandfather's staff fell off to, they do not want to tell grandfather. s42:004
5	Cause	tóó yírákíwú /PAT-1/LOC-2 ladle.up fill-into-tot-pst / cup.little other-in Búram tóó yírákíwú zòò ɓèrām ɗààná, nicí ɲú ròò, ròò á sùùŋwà. Buram ladles up gruel and fill it into another little bowl, gives her baby, the baby is drinking.

		s30:002
6	Cause	<p>yerawu tóó kèṅw-wà. begin-stat. spoon.up cool-subordin. Zòò tabkiwu lô, Búram dúrkísáwú bínà, yerawu tóó kèṅw-wà. When the gruel has boiled, Buram puts it down on the ground and starts spooning it up to cool it. s30:001</p>
7	Cause	<p>yééwú /PAT-1/ taṅ fùùwà will-stative/food / eat be.satisfied-subv.m. Wàn ganni njeṅ lǎṅ ǎ nì yéṅwtāṅ taṅ fùùwà fá díwuré yééwú yéṅwtāṅ taṅ fùùwà, kocùn díwu karī yéṅwtāṅ lwam bítè. The chief said to the women that a person who is never satisfied by eating food has come, he want to eat to his satisfaction, tomorrow you bring much food here. txt5:017</p>
8	Cause	<p>zimsikiwú/ ADV/ LOC be.numerous-blacken-cmpl-past Kùù á rí ndún giv dí, ṅu wúr á juu pí, juú jàṅ zimsikiwú lèè ki wúrâ. Grandfather has become an old man now, his field is all juu-weed, juu-weed stalks in great numbers blacken completely in that field. s37:003</p>
9	Concomitance	<p>gaw bááṅcírē be.big-pl. be.beautiful-hab-v.dtr. Gè lǎṅ yúuwà wu sṅw nyeeṅcírē gaw bááṅcírē. Go and do so, your hens will become many, get big and be beautiful. txt6:009</p>
10	Concomitance	<p>gbáá mánkíwú/PAT/fúṅw-wâ/ tire fed.up-cmpl-past /weeds / to.cut.clear Gbáb kùù gbáá mánkíwú juu fúṅwwâ ṅu wúrâ. Always grandfather is tired and fed up with cutting away the juu-weeds in his field. s38:001</p>
11	Concomitance	<p>gib baṅkíwú /ADV get.big get.beautiful-tot-pst / so Burám ròò suṅ sícì zòò dṁ pí, ròò gib baṅkíwú lèè, yéṅw gwàw ṅu gwaw rèṅw-wà fá. Buram's baby drinks only good gruel, the baby has grown so big and beautiful, sickness never makes him suffer. s30:003</p>
12	Constitutiveness	<p>AUX/ PAT/ swée rèṅwkì aux /3sg / laugh order-TOT Nikeṅ nyáṅ à yí bwaṅwci kùùkúú sáari ṅu surga, à ṅu swée rèṅwkì. Everybody say that we wait for grandfather's day of joint fieldwork, for to tease him properly. (to put him in place by laughing?)</p>

	s40:003
13	<p>Constitutiveness jǎŋw kecí /PAT fight know-hab / fight Wǎn à yí yééwú ndwèèŋ nàw wú ɲwàm jǎŋw kecí nwààŋ ɡɔɔŋ taara, à yí yééwú caŋw njéèŋ nàw pííŋ kecí yéŋwtâŋ lwǎm lwam ɡóóŋ taara. The chief said, I want 30 men, strong people, who know how to fight a fight, and, I also want 30 women, people who know how to make lots and lots of food. txt5:014</p>
14	<p>Constitutiveness kwaw reŋwkiré greet order-TOT-v.detrans. Mgbearé, móówu kwaw reŋwkiré, tííŋ ni sùù nùùŋ, búúúŋwu nuŋ sɛɛkiré. Having arrived, people greeted properly, showed the sleeping hut, they slept and awoke. txt5:006</p>
15	<p>Constitutiveness pííŋ kecí /PAT do know-hab /food much much Wǎn à yí yééwú ndwèèŋ nàw wú ɲwàm jǎŋw kecí nwààŋ ɡɔɔŋ taara, à yí yééwú caŋw njéèŋ nàw pííŋ kecí yéŋwtâŋ lwǎm lwam ɡóóŋ taara. The chief said, I want 30 men, strong people, who know how to fight a fight, said, I also want 30 women, people who know how to make lots and lots of food. txt5:014</p>
16	<p>Constitutiveness yééwú /PP /jaŋw njèwki-wà will-stat /with 2pl /fight tire.off-TOT-subord.v. Wǎn ganni ndwèèŋ lɔàŋ ǎ nùù nwààŋ njéwà fà díwuré yééwú wú díwu jaŋw njèwkiwà, kocùn wú díwu dàŋw bitè. The chief said to the men that A person who never tires of fight has come, he will fight with you and have enough, tomorrow you will meet each other here. txt5:016</p>
17	<p>Enablement AUX/PAT-2/di kwɛɛkìwí aux hyena come find-cmpl-past Mbéw dàà kúm báá tááŋ yɛɛ jíwci ɲú cún yèè konà, à nǎm di kwɛɛkìwí. A monkey before was roaming about seeking his tree nuts in the bush, then he came and found the hyena. txt2:004</p>
18	<p>Enablement nuŋ sɛɛkiré lie.down awaken-TOT-v.detrans. Mgbearé, móówu kwaw reŋwkiré, tííŋ ni sùù nùùŋ, búúúŋwu nuŋ sɛɛkiré. Having arrived, people greeted properly, showed the sleeping hut, they slept and awoke. txt5:006</p>

		nuŋ sɛ́ lǎà?
19	Manner	<p>ké sɔ́aŋkiré know wake.up-TOT-v.detrans. ŋu táá ké sɔ́aŋkiré à wáá ya caŋw níkéèŋ? His father was startled awake, saying who are you changed to again? txt4:025 /yɛɛ/. /sɔ́aŋ/, ké</p>
20	Manner	<p>PAT-1/ gwaw rɛ̀ŋw-à/NEG 3sg / be.ill order-subordin. /neg Burám ròd suŋ sícǐ zòd dɛ̀u pí, ròd gib baŋkíwú lèè, yéŋw gwàw ŋu gwaw rɛ̀ŋw-à fá. Boram's baby drinks only good gruel, the baby has grown so big and beautiful, sickness never makes him suffer. s30:003</p>
21	Precursion	<p>haaŋ dǐikǐ /PAT yawn leave-tot mouth Nìi taŋ fùùà fá lâw nyín da shiw tamkǐ lɔ́oŋ, haaŋ dǐikǐ nùùŋ, ðwaŋwɛ́ kòm làw. The man who was not satisfied by eating, planted solidly his feet squarely apart, opened wide his mouth, and waited for the kom. txt5:031</p>
22	Precursion	<p>sɛɛ nzaŋkǐ rá be.red be.clear-TOT-PsrDeTrans Saarî sɛɛ nzaŋkírǎ. Dawn came. txt4:020</p>
23	Subsequence	<p>dib rɛ̀ŋw-à/NEG go.out order-infl / not Mún kùú gǔrDF hérkíwú lèè, loo mgbee jínáwawu póm lô haanɛ́rɛ́ pí, nyûr dib rɛ̀ŋw-à fá, sókírǎ. Today grandfather's feet has become all light, as he comes running back to town he pants, the voice doesn't come properly out, burning(?). s39:001</p>
24	Subsequence	<p>nzán rɛ̀ŋwkiwu clean order-TOT-Past Sǎǎ kùu wûr nzán rɛ̀ŋwkiwu lô nyán kùú kě jaa. The time that grandfather's field had been properly cleaned up all together, grandfather doesn't know any more. s43:002</p>

Table B -4 **Action correlating chains**

VERB CHAINS IN NIZAA

Nr.	Co-event	Chains, with word-by-word- translation, complete sentence and free translation
1	Constitutiveness	<p>BEN/PAT-1/taa nì-wà go/give-impv/me/meat shoot give-Sub Mwáw ndónwú caŋw Sâŋ à gé nī yí nyààŋ taa nìwà. He passed hiring Sang again, saying Go for me to shoot me some meat. s40:005</p>
2	Constitutiveness	<p>BEN/PAT/fúmkí nì. aux grandpa weeds cut-TOT give Kùù mgbábkírí wú 'Búrám à dɛŋw nī yì mvúú dǎñī nitaŋw à kùú juú fúmkí nì. Grandfather joined with Buram saying 'brew me cultivation beer' so that the guys will clear out the juu-weeds for him. s38:003</p>
3	Constitutiveness	<p>dɛŋw nī /BEN/PAT brew give-impv / me/cultivation beer Kùù mgbábkírí wú 'Búrám à dɛŋw nī yì mvúú dǎñī nitaŋw à kùú juú fúmkí nì. Grandfather joined with Buram saying 'brew me cultivation beer' so that the guys will clear out the juu-weeds for him. s38:003</p>
4	Constitutiveness	<p>fúmkí niwú /BEN/PAT-1 cut.clear give-past/grandfather /field Móówu fúmkí niwú kùù wûr sàà súúsúù mgbeewu lô, kùù dógkiwu ɲú wûr mwaan sàè. As they had cleared grandfather's field for him at the time the first rains came, he sowed his field quickly (early) this year. s44:001</p>
5	Constitutiveness	<p>fúŋw nicí /BEN /PAT-1 cut.clear give-pres/grandfather's / weeds Mún á kùù súrgā, móówu fúŋw nicí kùù jùù lô, kùù wéérikiwú lèè. Today is grandfather's joint fieldwork, as people clear of the juu-weeds for grandfather, he is hopping happily about all the time. s42:001</p>
6	Constitutiveness	<p>gan ni /RECP/CMPL said give The hyena said to the monkey saying I was ambling about when I fell into the hole. txt2:006</p>
7	Constitutiveness	<p>ganni /RECP /CMPL say-give / women DEM /cmplM cmpl Wân ganni njeen lɔ̀ɔŋ ǎ nù yéŋwtâŋ taŋ fùùà fá díwuré yééwú yéŋwtâŋ taŋ fùùwà, kocùn díwu karī yéŋwtâŋ lwam ɓítè. The chief said to the women that a person who is never satisfied by eating food has come, he want to eat to his satisfaction, tomorrow you bring much food here. txt5:017</p>

8	Constitutiveness	ganni /RECP /Cmpl say-give /men DEM /cmpl Wân ganni ndwèēŋ lǎǎŋ ǎ nìi nwààŋ njéwâ fâ díwuré yééwú wú díwu jaŋw njèwkiwâ, kocùn wú díwu dâŋw bitê. The chief said to the men that A person who never tires of fight has come, he will fight with you and have enough, tomorrow you will meet each other here. txt5:016
9	Constitutiveness	gbom γααŋkí / PAT-1 scoff.at do.together / grandfather Nitâŋw gbom γααŋkí kùùkúú. The crowd scoffed noisily at grandfather. s40:001
10	Constitutiveness	ge nĩ/BEN go/give-Imprv/me/meat shoot give-Sub Mwáw ndóŋwú caŋw Sâŋ à gé nĩ yí nyààŋ taa nìwâ. He passed hiring Sang again, saying Go for me to shoot me some meat. s40:005
11	Constitutiveness	ŋgweé nicí /RECP brag give-hab / those who... Kùú ŋgweé nicí nàw ðu wûr mwaan fúm wú-ŋwa lǎǎŋ. Grandfather bragged to those who had not fast cleared their field. s44:002
12	Constitutiveness	PP / nyin γεε-kirê with chief / greet change-TOT-verb-dettrans Nàw kipôm ka ge ðuro wân jèè, wú wân nyin γεεkirê. The people of the village brought them to the chief's, to exchange greetings with the chief. txt5:007
13	Constitutiveness	whisper-into give+monkey Nǎm cee jũũŋasá tuunâ, fǎm ðùù róǎǎ nĩ mbêw à dú kwaŋw juũŋ cún ðirâ. The hyena descended down into the hole again, uncle Hare whispered to the monkey: "Go climb up into the tree again!" txt2:016
14	Constitutiveness	swεε γααŋ-wú / PAT laugh do.together / grandfather Móówu swεε γααŋwú kùù kútô. They laughed together at grandfather there. s39:005
15	Constitutiveness	swεεŋ toowu / PAT(ReIS)

VERB CHAINS IN NIZAA

	ask follow-past/thing do-pst-part. Uncle Hare asked what exactly had happened. txt2:013
16	Constitutiveness tííŋ ni /PAT-1 show give/house sleep Mgbearē, móówu kwaw reŋwkirē, tííŋ ni sùù nùùŋ, búúúúŋwu nuŋ sɛɛkirē. Having arrived, people greeted properly, showed the sleeping hut, they slept and awoke. txt5:006
17	Constitutiveness túgá ni/PAT-1/ LOC-2 spit-into-give + saliva+hand-in Ndún gùw túgáni twâm ówanâ, à mún yí níjɛɛri wú wân. The old man spit saliva into the hand, saying today I give over to you the chieftainship. txt4:015
18	Constitutiveness Yeg yɛɛ-ki-wu/PP separate change-cmpl-past-tr /pp Yeg yɛɛkiri wú cwáá lô, nǎm kpááŋná à yóŋ lóŋwɛí yí, yí yééwú mbêw tààŋwà. Then having changed to be separated from death, the hyena said hunger bites me, I want to eat the monkey. txt2:010
19	Constitutiveness yera /RECP/kpááŋ nì-wà/PAT(ReIS) start / wife/ speak give-sub./thing(ReIS) Dùù yera wáá kpááŋ nìwà yéŋw Sìŋw ɲgòò pínwúnâ. Hare started to tell his wife the thing Cock had done. txt1:007
20	Constitutiveness yééwú/NEG / RECP /kpááŋ nì -wà will-stat / not / grandfather /speak give-sub-v Ŋu wààwu se kekirá, búlɔ̀ɔ̀ŋ sewu mbân kùù fòò ðag gewunâ, yééwú ɲwǎ kùù kpááŋ nìwà. His grandchildren has seen and knows, they saw the place that grandfather's staff fell off to, they do not want to tell grandfather. s42:004

Table B - 5 Realization chains

<i>Nr.</i>	<i>Co-event</i>	<i>Chains, with word-by-word- translation, complete sentence and free translation</i>
1	Constitutiveness	<p>yéé ndónwú/PAT/ADVL want surpassPFV-stat/melon leaves/today Búram yéé ndónwú dǎŋw kew mún, gecí kú sùwà, ŋuro dǐsawu Sâŋ dweé nicí ŋú sàm. Buram most of all wants melon leaves today, that is what she is going to prepare, she leaves Sang (rest of phrase uncertain reading) s33:003</p>
2	Constitutiveness	<p>dì sé-rì-ré come see-hither-v.detrans. Nìi nwààŋ à dǐwu dì sériré yí yérǎ nwààŋ. The fighter said you seems to have come, so let us start the fight! txt5:034</p>
3	Constitutiveness	<p>sóó tamakírí /LOC hook be.solid-TOT-Pst-Tr / in.garment Gonkiri ŋú yéŋw, cam ləərí-L sóó tamakírí bágrinà ŋwíŋ hérkírǎ, haŋcíré pí, ŋwàm fá jàà. Drinking his fill, his 6th finger got solidly hooked in his clothes, his body became all light, he was panting only, there was no more strength. s43:003</p>
4	Constitutiveness	<p>reŋwki /PAT/6úúŋ jɪŋkiré. work-tot/his mouth/close return-TOT-v.dtr. Kòm làw cɛɛ jʊuŋ sáriwu lô dǎg ndónáwa nílàw nùŋnà wú cǎà cǎà nyán, nílàw reŋwki ŋu nùŋ 6úúŋ jɪŋkiré. As the kom came back down again, it fell and entered into that man's mouth with branches and all, he worked his mouth and closed it up again. txt5:032</p>
5	Constitutiveness	<p>múúŋ ranáwa /LOC disappear be.lost-into-away / sky-in Kòm tíŋ gìw dàà nyínwú wân dǐŋnà, nìi nwààŋ njéwà fà lâw yáúwaré, bugkí kòm tíŋ lâw wù 6wáá mum, subkiré, mbúú kwəŋwré, kòmçún lâw múúŋ ranáwa gúúŋninà. A great kom tree stood in the chief's yard, the man never tiring of fight rose up, gripped that kom trunk with one hand, tore it up, and threw it upwards, the big kom disappeared vanishing into the sky. txt5:029</p>

Bibliography

- Alsina, Alex (1997): 'A Theory of Complex Predicates: Evidence from Causatives in Bantu and Romance,' in: A. Alsina/ J. Bresnan/ P. Sells (ed.): *Complex Predicates*, CSLI Publications, Stanford
- Bodomo, Adams (1997): *Paths and Pathfinders: Exploring the Syntax and Semantics of Complex Verbal Predicates in Dagaare and other Languages*, doctoral dissertation in Linguistics, Norwegian University of Science and Technology, Trondheim
- Dowty, David R. (1991): 'Thematic proto-roles and argument selection' in: *Language* vol. 67: 574-619
- Durie, Mark (1997): Grammatical Structure in Verb Serialization, in: A. Alsina/ J. Bresnan/ P. Sells (ed.): *Complex Predicates*, CSLI Publications, Stanford
- Endresen, Rolf Theil (1990/91): Diachronic Aspects of the Phonology of Nizaa, in *Journal of African Languages and Linguistics*, vol. 12: 171-194, Walter de Gruyter, Berlin
- Endresen, Rolf Theil (1992): La phonologie de la Langue nizaa (nizaà), in: *Nordic Journal of African Studies*, vol.1 nr. 1: 28-52, Uppsala
- Endresen, Rolf Theil (2001) : An Overview of the Verbal system of Nizaa, MS.
- Fagerli, Ole Torfinn (2001): 'Malefactive by means of GIVE' in : Hanne Gram Simonsen/Rolf Theil Endresen (ed.) : *A Cognitive Approach to the Verb: Morphological and Constructional Perspectives*, Cognitive Linguistic Research 16, Mouton de Gruyter, Berlin
- Givón, Talmy (1991): Serial Verbs and the Mental Reality of 'Event': Grammatical vs. Cognitive Packaging, in: '*Approaches to Grammaticalization*', vol.1, Focus on theoretical and Methodological Issues, ed. E.C. Traugott/B. Heine, Philadelphia/Amsterdam
- Goldberg, Adele (1995): *Constructions: A construction grammar approach to argument structure*. Chicago: University of Chicago Press
- Hopper, Paul J. & Traugott, Elisabeth (1993): *Grammaticalization*, Cambridge University Press, Cambridge
- Langacker, R.W. (1991): *Foundations of cognitive grammar*, vol. 2. Descriptive application. Stanford, CA: Stanford University Press, p. 292 (cited in Fagerli (2001))
- Lord, Carol (1993): Historical Change in Serial Verb Constructions, *Typological Studies in Language* vol. 26, Amsterdam/Philadelphia

- Payne, Thomas E. (1997): *Describing Morphosyntax: a Guide for Field Linguists*, Cambridge
- Longacre, Robert E. (1983): *The Grammar of Discourse*, New York/London
- Rappaport Hovav, Malka & Levin, Beth (2001): "An event structure account of English resultatives." In: *Language* vol. 77, nr. 4: 766- 797
- Talmy, Leonard (2000): *Toward a Cognitive Semantics, Volume I: Concept Structuring Systems*, MIT Press, Cambridge/London
- Talmy, Leonard (2000): *Toward a Cognitive Semantics, Volume II: Typology and Process in Concept Structuring*, MIT Press, Cambridge/London
- Taylor, John R. (1995): *Linguistic categorization: Prototypes in linguistic theory*, 2nd edition, Oxford University Press, New York